MENTAL HEALTH INTENSIVE CASE MANAGEMENT (MHICM) IN THE DEPARTMENT OF VETERANS AFFAIRS: THE FOURTH NATIONAL PERFORMANCE MONITORING REPORT FY 2000

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Mental Health Intensive Case Management (MHICM) in the Department of Veterans Affairs: The Fourth National Performance Monitoring Report - FY 2000

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by

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Executive Summary

This is the fourth national report on the evaluation of the Department of Veterans Affairs Mental Health Intensive Case Management (MHICM) program, previously called "VA Intensive Psychiatric Community Care" or "IPCC". MHICM is an innovative, experimentally validated approach to providing care for veterans with severe and persistent mental illness. Previous reports (Rosenheck et al., 1997; Neale et al., 1999, 2000) have demonstrated that: 1) assertive community treatment is a cost-effective approach to caring for veterans with serious mental illness who are high users of VA inpatient resources; 2) MHICM benefits are maintained over the long-term (2-5 years); and 3) MHICM can be implemented and monitored in VA settings nationally. This report, which presents developments and performance data for FY 2000, will refer to past efforts and evaluations as "IPCC" and FY 2000 teams and data as "MHICM".

The MHICM Program

VHA Directive 2000-034, issued on October 2, 2000, defined "Mental Health Intensive Case Management" and identified criteria for client entry, program operation and monitoring. MHICM teams seek to deliver high quality services that: 1) provide intensive, flexible community support; 2) improve health status (reduce psychiatric symptoms & substance abuse); 3) reduce psychiatric inpatient hospital use and dependency; 4) improve community adjustment, functioning, and quality of life; 5) enhance satisfaction with services; and 6) reduce treatment costs.

Extensive literature demonstrating that assertive community treatment teams (ACT) or intensive case management programs can improve clinical status and reduce psychiatric hospital use for people with serious mental illness has prompted researchers, practitioners and advocates to identify ACT as an essential evidence-based practice for this population (Phillips et al., 2001). MHICM teams modeled on ACT provide individualized services in the community for veterans with serious mental illness who are high users of VA mental health inpatient resources. MHICM services are organized around a core set of treatment elements described in VHA Directive 2000-034: 1) Intensity of contact; 2) Flexibility and community orientation; 3) Rehabilitation focus; and 4) Continuity and responsibility.

System-wide Dissemination

At the end of FY 2000, 50 MHICM teams were in operation and a dozen more teams were in development. Three new teams had been implemented by the Rocky Mountain Healthcare System, two by the Healthcare System of Ohio, and one by the Central Iowa Healthcare System. A longstanding MHICM team at the Bronx had been discontinued. As specified in VHA Directive 2000-034, MHICM team performance and outcomes are monitored by the Northeast Program Evaluation Center (NEPEC) within the VA Connecticut Healthcare System. Data are presented here for 3,120 veterans who received MHICM services between October 1, 1999 and September 30, 2000 (FY 2000). Of this group, 2,683 veterans (86.0%) had baseline interview data and 1,974 (63.3%) had follow-up interview data for FY 2000.

Client Characteristics

Overall, 77.7% of MHICM veterans had a diagnosis of psychotic illness at entry and they had

spent an average of 104 days in the hospital in the year prior to program entry. Over half of all MHICM veterans (57.7%) had been hospitalized for *more than two years* in their lives, with over two decades of illness since their first hospital stay (mean duration=22.5 years). A majority (57.7%) of MHICM clients received VA compensation for a service-connected disability, and nine in ten (92.9%) received some combination of VA and/or Social Security funds, with almost half (48.6%) indicating their funds were handled by a designated representative payee. This is clearly a group of veterans who are dealing with long-term illness and severe disability.

Service Delivery

Altogether 84.7% of MHICM veterans were seen weekly or more by MHICM team staff; 66.7% were seen for more than one hour per week over a six-month period, and 87.2% received the majority of their care in the community. MHICM clients had an average of 75 face-to-face contacts with MHICM staff during FY 2000, or 1.45 face-to-face visits per week, per veteran. A relatively small number of veterans (N=368 or 12.2% of 2,996) were discharged from the program during the year. On average, each currently participating veteran had received MHICM services for 995 days, or almost 3 years, at the conclusion of the Fiscal Year.

Outcomes

Veterans treated by MHICM teams showed average reductions in psychiatric hospital days of 47.2 days (73.2%) during their first six months in the program. Similar reductions were achieved through 12, 18, and 24 month periods. Every team reduced hospital use. Analysis of symptom reports found statistically significant improvement of about 10% on a measure of observed symptoms (BPRS mean change = -3.94, t=-10.36, $p<0.0001$) and 11% on self-reported symptom severity scores (mean change = -0.21, t=-13.05, $p<0.0001$). Client reports of housing independence increased by 15% (mean change = +0.44, t=13.98, $p<0.0001$) and quality of life improved by 11% (mean change = +2.75, t=17.64, $p<0.0001$) with MHICM treatment. MHICM veterans were significantly more satisfied with MHICM community-based services relative to standard VA mental health care (+20%; mean difference =+ 0.62, t=20.45, $p<0.0001$). This was reflected in significant improvement in satisfaction with overall VA mental health services at follow-up (+18%; mean change = +1.50, t=22.74, $p<0.0001$).

Conclusion

Development of MHICM in VA has followed a model sequence of problem identification, program development, evaluation, and dissemination (Rosenheck and Neale, in press; Rosenheck, under review). Careful implementation and sustained monitoring have resulted in effective community-based services for veterans with severe and persistent mental illness, a highly vulnerable and deserving population. Modeled on evidence-based, "best practice" programs in use elsewhere in the nation (Phillips et al., 2001), the MHICM program is a well-defined intervention that can be adapted to meet local needs. The program has been successfully disseminated to more than 50 VA medical centers and site-by-site monitoring data show that it continues to provide effective and efficient services to several thousand deserving veterans in great need. Initial review of outliers and team reports support continued monitoring of team and caseload size and attention to staff training needs.

Acknowledgments

We dedicate this Fourth National Performance Monitoring Report to Dr. Paul Errera, who is honored at his retirement as it is printed. Paul's long and distinguished career with the U.S. Department of Veterans Affairs will be ever entwined with VA's implementation of community-based mental health services for veterans. In 1987, as the Former Chief of Psychiatry at West Haven, Paul played a pivotal role in developing and evaluating the original Region 1 Mental Health Initiatives (MHI) programs. In 1993, as the Director of Mental Health and Behavioral Sciences, he advocated strongly and successfully for national dissemination of VA Intensive Psychiatric Community Care (IPCC) programs. On behalf of the many veterans who have found new opportunities for recovery outside hospital walls and the many clinicians who have discovered new ways to help, we express our appreciation and gratitude to Paul for his timely and timeless support.

This report and the successful dissemination of MHICM owe much to ongoing support from Laurent Lehmann MD, Chief Consultant, Mental Health Strategic Healthcare Group (MHSHG) and William Van Stone MD, Chief of Treatment Services Division (MHSHG); and from Richard McCormick PhD and Miklos Losonczy MD PhD (Co-Chairs) and other members of the Under Secretary's Special Committee on Care of Severely Chronically Mentally Ill Veterans and its Consumer Council. In the past fourteen years, hundreds of VA clinical and administrative staff have worked on MHICM teams to find alternatives to hospitalization for veterans with serious mental illness and to provide the information on which this series of reports is based. Implementation of MHICM teams within VA has also benefited from efforts on behalf of assertive community treatment by individuals in other public sector agencies, including: William Knoedler MD, Deborah Allness MSSW, and Mary Ann Test PhD from the Program for Assertive Community Treatment in Madison, Wisconsin; Claudia Wink-Basing MSW and Cheri Sixbey RN from the Assertive Community Treatment Association, Inc.; Neil Meisler MSW and Alberto Santos MD from the Medical University of South Carolina; Fred Frese PhD and Elizabeth Edgar RN from the National Alliance for the Mentally Ill; and Neal Brown MPA from the Center for Mental Health Services at the Substance Abuse and Mental Health Services Administration (SAMHSA). For the present reporting period, special thanks are due to: Andrea Clifford LCSW and Ken Malas MD for mentoring new MHICM teams in the Rocky Mountain Healthcare System (VISN 19); Susan McCutcheon PhD at Brecksville for assisting new MHICM teams in the Ohio Healthcare System (VISN 10); and Gregg Joly MSW (Minneapolis MHICM) for mentoring a new MHICM team in Central Iowa (VISN 14). At NEPEC, we continue to be blessed with terrific programming and data management support from Bernice Zigler, Alexandra Ackles, and Dennis Thompson, whose diligence and precision make this report possible.

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Changes in VA Mental Health Care

The closing decade of the twentieth century confronted the Department of Veterans Affairs (VA) and other public mental health care systems with the significant challenge of providing appropriate, humane, and efficient care to persons with serious mental illness. Despite closure of 40,000 psychiatric hospital beds between 1957 and 1988, VA relied heavily on inpatient treatment through the 1990's, spending over 70% of its mental health budget on costly hospital care as recently as FY 1996 (Rosenheck, 1997).

In 1995, VHA began a fundamental reorganization of its structure and services, in pursuit of a more comprehensive, integrated healthcare system, with enhanced priorities of customer satisfaction, cost efficiency, and accountability. Manifestations of change have included introduction of data-based approaches to care, decentralization of VA administrative and budget authority to 22 veterans integrated service networks (VISNs), reallocation of healthcare resources, and a shift of focus from inpatient to outpatient modes of service delivery.

In mental health, organizational changes have prompted dramatic reductions in inpatient service use. Between Fiscal Years 1994 and 2000, lengths of stay in general psychiatry inpatient programs declined by 54% (from 33 to 15 days), and 5,749 general psychiatry beds (58% of the 1994 total) were closed. These included 1,145 (61%) of 1,862 long-stay beds (those occupied for more than 1 year) (Rosenheck, Greenberg and DiLella, 2001). In FY 2000 alone, 296 general psychiatry beds (7% of the FY 1999 total), including 117 long-stay beds (14%), were closed. The effect of these changes has been offset, to some degree, by expansion of outpatient and residential rehabilitation services. Between FY 1994 and 2000 the number of veterans receiving outpatient psychiatric services increased by 168,266 (36.0%) and the number of clinical contacts per treated veteran rose from 14.8 to 15.9 (7.4%). For the same period, mental health program and patient costs dropped by 8.6% and 22.3%, respectively, while non-mental health costs rose by 25.2%. It is still unclear, however, what level of outpatient services is adequate for treatment and rehabilitation of veterans with the most severely disabling mental illnesses.

The shift from inpatient to outpatient mental health care in VA would be expected to have its greatest impact on those with the most severely disabling mental illnesses, veterans who have traditionally relied on hospital treatment, especially long-term hospital treatment -- veterans who perhaps can least tolerate rapid change. Individuals with serious mental illness are among the "least well off" (Rosenheck et al., 1998) and the most vulnerable, commonly falling prey to homelessness, substance abuse, profound social isolation, and vocational dysfunction (Grob, 1994). Ethicists (Callahan, 1995; Boyle, 1995) and services researchers (Rosenheck, 1999; Schlesinger, 1995; Schlesinger and Mechanic, 1993) have emphasized that core values in our

society urge us not to neglect the most vulnerable citizens, and to recognize that their vulnerability earns them special claim on public resources. Such ethical and societal goals warrant careful attention to the development and monitoring of quality mental health services, particularly for the most needy veterans.

Accountability and Monitoring

VA healthcare increasingly emphasizes value, customer service, and accountability and provides specific impetus for implementation and careful monitoring of community-based care (Kizer, 1998). VA values clearly underscore the need for alternatives to inpatient hospitalization and enhanced attention to accountability and customer satisfaction. The Veterans Eligibility Reform Act of 1996 (Public Law 104-262, Section 104), furthermore, committed VA to maintain its capacity to provide specialized services for the most vulnerable veterans and mandates review of leadership reports on capacity by the VA Under Secretary for Health's Special Committee for the Care of Severely Chronically Mentally Ill Veterans (the "SMI Committee"). In 1999, the Under Secretary approved a recommendation by the SMI Committee to make intensive case management programs such as IPCC more widely available for veterans with serious mental illness (Recommendation 3, SMI Committee, 1999). In 2000, his successor issued a directive, VHA 2000-034, which defined "Mental Health Intensive Case Management" services for veterans with serious mental illnesses.

Case Management

For several decades, mental health clinicians and researchers, dismayed by the adverse consequences of precipitous State Hospital closures during the 1960's and 1970's, have sought to develop humane, health-promoting alternatives to long term hospital care for severely mentally ill persons in community settings. Case management services have emerged as a widely preferred alternative to fragmented outpatient care. In this approach, a specialist takes responsibility for facilitating access to and coordinating delivery of the full range of services needed by people with severe mental illness. General, or broker model, case management has been used for a variety of purposes ranging from cost cutting to improving clinical outcomes, and has only limited research support for its effectiveness. **Assertive community treatment** (**ACT**), a model of integrated, intensive, and comprehensive services provided by a team of skilled clinical case managers in community settings, offers a more supportive approach for individuals with serious mental illness that has been carefully developed and evaluated.

Assertive Community Treatment (ACT)

ACT was first implemented as the Program of Assertive Community Treatment (PACT) in Madison, Wisconsin over 25 years ago and evaluated in a series of experimental studies (Marx et al, 1973; Stein et al., 1975; Stein and Test, 1980a, 1980b; Weisbrod et al., 1980). ACT clinicians meet their clients in the community and provide comprehensive services, including social support, skills training, and medical care, wherever and whenever they are most needed (Allness and Knoedler, 1998; Stein and Santos, 1998). A team of up to 15 case managers provides a virtual "hospital without walls" replacing the custodial functions of an institution with personal support

and therapeutic skills training in natural settings.[1]

ACT Replication

By 1978, the success of the Madison PACT studies had begun to influence public policy. Wisconsin began shifting inpatient treatment funds toward community-based services and Michigan funded Harbinger, the first replication of the PACT experiment (Mowbray et al., 1997; Mulder, 1985. By 1987, ACT principles had been adapted in demonstrations by numerous municipal and state mental health care systems, including Chicago, Philadelphia, Ohio, and New York (Test, 1992; Olfson, 1990; Burns and Santos, 1995; Deci et al., 1995). Replications varied with respect to the breadth and intensity of services, the accessibility and training of staff, and their effectiveness (Olfson, 1990; Stein, 1990; Deci et al., 1995; Essock and Kontos, 1995). By 1997, at least 14 states had developed ACT initiatives (Allness et al., 1997; Meisler, 1997). Rhode Island, Delaware and Texas had established ACT as a standard "best practice" and required state-funded providers of services for the seriously mentally ill to develop ACT team services for their most troubled clients. The following year, the Schizophrenia Patient Outcomes Research Team (PORT) highlighted ACT's effectiveness and relatively limited dissemination in its findings (Lehman et al., 1998) and the National Alliance for the Mentally Ill (NAMI) made state funding for ACT services a central element of its anti-stigma advocacy campaign (NAMI, 1999). To date, more than forty states and the District of Columbia report at least one PACT or ACT program, or an active legislative/lobbying effort on behalf of PACT (NAMI, 2000). Outside the United States, ACT services are being adopted in Europe and around the world (Burns et al., 2001). It is notable that a recent comparison of VA and non-VA treatments for schizophrenia found VA patients were much less likely to receive case management services (Rosenheck et al., in press).

ACT Research

Experimental studies published over 20 years have reported that concentrating treatment resources in community-based ACT teams or intensive case management programs can result in improved clinical status of severely mentally ill patients at no additional cost (Bond et al., 1989; Hoult et al, 1984; Mulder, 1985; Stein and Test, 1980; Wasylenki et al., 1985; Weisbrod, Stein and Test, 1980). Other studies, however, have found case management to be associated with no clinical change and/or increased service utilization and cost (Bond et al., 1991; Curtis et al., 1992; Drake et al., 1998; Essock et al., 1998; Franklin et al., 1987; McFarlane et al., 1992). Literature reviews conclude that intensive community treatment frequently reduces hospital use but does not always achieve net cost-savings, and far less consistently achieves clinical improvement (Burns and Santos, 1995; Mueser, 1998; Olfson, 1992; Scott and Dixon, 1995). Most recent reviews have identified assertive community treatment as a clinically effective "evidence-based practice" when implemented correctly which can be cost-effective for clients who are high users of inpatient

[1] A typical PACT team is staffed with a multi-disciplinary group of 10-15 clinicians who are configured to provide a comprehensive array of clinical and rehabilitation services every day (including evenings, weekends, holidays) and ensure 24 hour per day access for needed crisis intervention (Allness and Knoedler, 1998). A typical ACT team has 5-8 clinicians who, by necessity, provide less comprehensive services for fewer hours per week and rely on emergency/admitting staff or others to consult them about off-hour crises.

services (Marshall et al., 1999; Phillips et al., 2001).

VA Demonstration: MHI, IPCC

VA initiated a demonstration program of intensive case management teams based on ACT principles at ten northeastern VA medical centers in 1987. Originally a regional demonstration (the Region 1 Mental Health Initiatives or MHI), VA's adaptation of assertive community treatment became known as Intensive Psychiatric Community Care (IPCC). A rigorous experimental study of this effort demonstrated the cost-effectiveness of this type of program in VA (Rosenheck et al., 1995; Rosenheck and Neale, 1998a). The IPCC model, while developed for the most troubled, high hospital users, is based on flexible operation guidelines that may be applicable, with modifications, to other patient populations. Studies have shown that effective program performance requires adherence to the treatment model supported by training and performance monitoring (Rosenheck and Neale, 1998b).

Program Objectives and Principles

IPCC services are delivered by integrated, multidisciplinary teams and are based on the Substance Abuse Mental Health Services Administration (SAMHSA) ACT standards. IPCC teams seek to deliver high quality services that:

- provide intensive, flexible community support;
- improve health status (reduce psychiatric symptoms & substance abuse);
- reduce psychiatric inpatient hospital use and dependency;
- improve community adjustment, functioning, and quality of life;
- enhance satisfaction with services; and
- reduce treatment costs.

To accomplish these objectives, IPCC teams adhere to four core treatment elements, most recently outlined in VHA Directive 2000-034:

- Intensity of Contact. High intensity of care primarily through home and community visits, with low caseloads (seven to fifteen veterans per clinician), allowing rapid attention to crisis and development of community living skills to prevent crisis in this exceptionally vulnerable population.

- Flexibility and Community Orientation. Flexibility and community orientation with most services provided in community settings and involving integration with natural support systems whenever possible (e.g., family members, landlords, employer).

- Rehabilitation Focus. Focus on rehabilitation through practical problem solving, crisis resolution, adaptive skill building, and transition to self-care and independent living where possible.

- Continuity and Responsibility. Identification of the team as a "fixed point of clinical responsibility" providing continuity of care for each veteran, wherever the veteran happens to be, for at least one year, with subsequent care subject to review of continuing need for intensive services.

Demonstration Findings

Analysis of data from the original multi-site MHI demonstration project yielded evidence that assertive community treatment principles could be adapted successfully within the VA healthcare system, that community-based treatment approaches could be effective in reducing hospital use and costs and improving clinical status, and that positive outcomes could be sustained or enhanced over extended time periods. Two-year demonstration findings (Rosenheck and Neale, 1998a) confirmed previous experimental research by showing significant reductions in hospital use and costs, and improvements in psychiatric status and social functioning, for veterans receiving IPCC services (Burns and Santos, 1995; Olfson, 1989; Scott and Dixon, 1995). Overall, average health care costs were $4,860 (13%) less per patient per year for those treated in IPCC. The demonstration also illustrated the value of program monitoring that addresses facility and client characteristics, administrative mission and support, and model fidelity, all of which can substantially influence program development and impact.

Program Performance Monitoring

The resource intensity of IPCC services and the program's novelty for VA have warranted collection of data on client status, service delivery and utilization, and clinical and cost outcomes, through a national monitoring and evaluation system developed and managed by VA's Northeast Program Evaluation Center (NEPEC). Integration and feedback of national data have reinforced program accountability and maintained performance standards that have been shown in the scientific literature to be essential to program effectiveness.

The 1997 IPCC Report: 1) reviewed findings from a two-year experimental design evaluation of IPCC in VA; 2) presented extended follow-up data addressing long-term clinical and cost impact on a subset of patients whose progress was followed for up to five years; 3) described a novel training and performance monitoring program developed at the Northeast Program Evaluation Center (NEPEC) for dissemination of this model; and 4) summarized initial performance data from the program's national dissemination through March 31, 1997. The second IPCC Report summarized program developments and performance data for veterans treated by 41 IPCC teams through Fiscal Year 1998. The third report summarized performance monitors for veterans treated at 44 sites during FY 1999. The present report summarizes performance monitors and outliers for 3,120 veterans treated by 46 teams during FY 2000.

MHICM Directive

As FY 2000 concluded, VHA leadership issued a directive (VHA 2000-034) that defines an array of community-based intensive case management programs for veterans with serious mental illness as **Mental Health Intensive Case Management (MHICM)** teams (enclosed as

Appendix A). These would include IPCC, ACT, and other intensive case management services that meet standards of service intensity and access, such as assuring low client to staff ratios and providing treatment and rehabilitation services in community settings. Anticipating this change, at the suggestion of the Strategic Implementation Committee for the Under Secretary's Committee on the Care of Severely Chronically Mentally Ill Veterans (known as the SMI Special Committee), IPCC programs and the national evaluation were renamed as MHICM at the beginning of FY 2000. MHICM teams participate in the national performance monitoring system presented in this report, including the use of specific DSS identifiers (#552 and #546) for clinical workload. Programs providing less intensive case management services are not monitored but workload is reported under DSS identifier #564.

Team Development

In 1997, a number of VA facilities and Veterans Integrated Service Networks (VISN) began to express interest in implementing MHICM teams for veterans with serious mental illness or with co-occurring mental illness and substance abuse disorders. Where feasible, NEPEC staff have provided assistance in the form of information, material, linkage and technical support for sites with various levels of commitment to implementation of the model. To assist local leaders with planning and decision-making about community-based intensive case management services, NEPEC developed an **Implementation Planning Packet** in 1999. The packet contained descriptive materials and literature about the MHICM program, a brief bibliography, an outline of minimum program standards and expectations, and implementation/fidelity checklists of essential elements of MHICM and assertive community treatment. It is useful for planning a new MHICM team or comparing the structure of an existing case management team to the model. A revised version of these materials is included as **Appendix B** in this Report. It can also be downloaded with MHICM monitoring forms from the Mental Health Strategic Healthcare Group web page on the VA intranet (vaww.mentalhealth.med.va.gov).

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Chapter Two:
National Assessment of MHICM Program Performance

1994 VA Dissemination of IPCC

In 1993, responding to Congressional hearings and requests to enhance the priority of care for seriously mentally ill veterans within VA, the Director of Mental Health and Behavioral Sciences Service (Paul Errera, M.D.) submitted a "National Initiative for Seriously Mentally Ill Veterans" with dissemination of Intensive Psychiatric Community Care (IPCC) programs as a central element. The VA National Planning Board approved the plan and Acting Under Secretary for Health agreed to provide $1.5 million in FY 1994 and $10 million in FY 1995 to establish new IPCC programs. The initial plan included additional funds for FY 1996 and FY 1997. All VA Medical Centers and freestanding Outpatient Clinics were eligible to apply for IPCC funds. Selection of new IPCC program sites involved several levels of review.

Between 1993 and 1995, IPCC teams were implemented at 30 additional sites around the country using national funds, with one quarter of available resources allocated to each of the four existing regions. On the basis of detailed implementation and outcome data from the original MHI demonstration, a standard resource package was designed to support operation of IPCC teams. This package consisted of $325,000 for 6.25 FTE; $15,000 in All Other funds; and $30,000 (10% of personnel) for medical center administrative costs, for a total of $370,000 recurring. Seventeen sites were awarded the standard package and six sites were funded at lower levels (3.5 FTE; $200,000 PS; $15,000 AO; $20,000 OH) due to lower number of eligible veterans or rural location.

In support of the national dissemination, IPCC teams at Brockton, Canandaigua, Montrose and West Haven each received 1.0 FTE to allow experienced staff to act as mentor-monitors for 6-8 new IPCC teams. Over a two-year period, mentor-monitor teams participated in various planning and training activities, including: a 2-day planning meeting; weekly conference calls; four orientation and training sessions with clusters of teams; site visits; and ongoing formal and informal communications via mail, e-mail, fax, and telephone. Staff from each new program site attended a 1½ day orientation and training session with NEPEC staff, mentor-monitors, and other new programs, then accompanied mentor-monitor staff to their home facility for several days of direct observation and training. Calls were held weekly or biweekly for 6-12 months and then tapered depending upon team status. All new teams maintained formal contact with their mentor-monitors for at least one year after orientation and training.

In addition to regular contacts with new program sites, mentor-monitors reviewed each team's progress via planning conference calls with NEPEC staff and other mentor-monitors (weekly: July 1994 to June 1996; quarterly: July 1996 to September 1997). Mentor-monitors also completed implementation checklists at six months and one year, reviewing with each team details of its configuration and operation. Finally, staff from each mentor-monitor team conducted at least one site visit of a FY 1994 program after nine to twelve months of operation. Site visits

enabled mentor-monitors to observe the team when it was fully operational and to help the team resolve implementation difficulties.

In 1997, as VHA decentralized management and resources, individual facilities and Veterans Integrated Service Networks (VISNs) began to request NEPEC consultation, training and technical assistance to implement IPCC teams. In subsequent years, teams were started with local or network resources in Detroit, Columbus, Cincinnati, Dayton, Central Iowa, Grand Junction, Salt Lake City, and Southern Colorado. Many other sites requested information or consultation, and some facilities implemented mental health case management teams that varied in structure and intensity of services without NEPEC assistance. In FY 2000, monitoring of IPCC teams at the Bronx was discontinued after consultation revealed the program was no longer operating within MHICM standards. Members of the Bronx IPCC team were reassigned to more traditional clinical and case management services. Monitoring data for the Waco (Central Texas) program were incomplete and efforts were underway to restore full data collection. As a result, there are few data to present for these teams in this report. IPCC teams at Mountain Home, Salisbury, and Spokane were merged with other programs, substantially reducing staff resources and caseloads, and affecting program fidelity and outcomes.

MHICM National Program Monitoring

National monitoring of MHICM program performance, as specified in VHA Directive 2000-034, relies on multiple sources: client interviews, clinician and program progress reports, and centralized VA databases. Sources of data include: 1. Monthly FTE / Caseload reports monitoring program productivity, workload, staff turnover, and admissions to the program; 2. Structured clinical interviews with each veteran at entry (Initial Data Form-IDF) and semi-annually thereafter (Follow-up Data Form-FDF) addressing client characteristics, clinical status, functioning, and service use; 3. Semi-annual clinical progress reports of IPCC services and outcomes, completed by the veteran's primary case manager; 4. VA automated inpatient and outpatient service use data; 5. ACT Fidelity assessments of program conformity with MHICM and ACT program guidelines; and 6. Staffing and budget summaries completed as part of an annual program progress report. Evaluation forms have been revised several times to reduce monitoring paperwork.

MHICM program evaluation and monitoring variables target four domains following the classic formulation of Donabedian (1980): 1) **Program structure**: utilization and configuration of allocated resources, and caseload levels; 2) **Client characteristics**: socio-demographic, disability level, and clinical status at entry; 3) **Program Process**: pattern of service delivery, therapeutic activities and alliance, and readmissions; and 4) **Outcomes**: client use of hospital services, symptoms, functioning, quality of life, and satisfaction with services. The following section of the report presents data on each monitoring domain, from client interviews, clinician progress reports, and automated databases, for veterans with a follow-up interview completed between October 1, 1999 and September 30, 2000. **Table 2-1** lists 47 current MHICM program monitors, indicating for each its relevant domain and program objective, the table in which its data are presented in this report, and whether it is a "critical" program monitor (see below). **Appendix D** summarizes the source and creation of all variables included in the performance monitoring tables for this report.

Monitoring Team Performance

Premises on Which the Monitoring System is Based. MHICM care is a relatively new clinical activity in VA, requiring considerable freedom for clinical innovation. Monitoring efforts are based on the assumption that rigid regulations or performance standards are not appropriate for this program in its current stage of development. Premature standardization might stifle the creative evolution of this new modality and fail to account for local variation. At the same time, since both VA and non-VA studies show that poor implementation is associated with low cost-effectiveness (Rosenheck and Neale, 1998b; Mueser et al., 1998; Phillips et al., 2001), it is important to monitor the program as completely and objectively as possible and to identify performance standards where they are suggested by research findings. Through this monitoring system we have sought to assemble a body of data that can guide national and network program developers and front line clinicians, as they implement MHICM programs over the coming years.

Critical Monitors: Statistical Norms vs. Practice Standards. Although a complete set of absolute practice standards has not been established for this program, monitoring data allow more than a description of the performance of individual sites and statistical norms have been computed for selected critical monitors. The distinction between statistical norms and formal practice standards is an important one. Practice standards are established by a consensus of professionals and represent directive guidelines for appropriate clinical practice. They codify how health care should be conducted. Statistical norms, in contrast, reflect how health care is practiced on average without specifying exactly what is and what is not acceptable practice. Although some practice standards have been established for the MHICM program through VHA Directive 2000-034, many aspects of the program have yet to be quantitatively standardized. Even in these areas, however, practice variation within the MHICM program can be measured and statistical outliers can be identified. Identification of statistical outliers must not be confused with the identification of practice standard violations. Statistical outliers are extremes on a continuum and, as such, deserve attention. However, without further exploration of specific circumstances, conclusions cannot be drawn regarding their exact meaning for program performance at a particular site.

FY 2000 Critical monitors. Nineteen of forty-seven current MHICM measures identified in Table 2-1 were selected as critical monitors because they assess aspects of the program that are of special importance to fulfilling its mission[2]. Most of these monitors have clear directionality (i.e. extremely large or small values suggesting a departure from program values and goals). It must, once again, be emphasized that performance monitors should not be considered, by themselves, as absolute indicators of the quality of care delivered at particular sites. In most cases they can be used to properly identify statistical outliers, the importance of which must be determined by follow-up discussions or visits with the sites.

Identification of Statistical Outlier Sites. For each monitor, the data from each site are presented in tabular form. At the bottom of the column the average value across all veterans and the average value for all sites are presented, along with the standard deviation for all sites. In the original report, sites were identified as outliers on a variable if the site value was more than

[2]Two monitors from the 1997 Report were dropped from national monitoring when the Readmission Review Form was made optional as part of paperwork reduction effective January 1, 1998. Client symptom and functioning monitors (each comprised of two measures) were separated, with no net change in monitors.

one standard deviation from the mean.

Beginning with the Second Performance Report, outliers were identified by a more complex statistical procedure involving risk adjustment for differences in baseline characteristics of veterans across sites as well as differences in sample size. First, simple change scores were created for each variable by subtracting Pre- (entry or baseline) values from Post- (latest follow-up) values, and computing site means. Second, baseline covariates were standardized with a mean of zero by subtracting the mean from each value, and computing transformed means. Third, analyses of covariance were run for each outcome variable, with 13 baseline covariates and 2 time-in-program variables. Least-squares means adjusted for covariates were computed for each site and t-tests were run comparing the adjusted means from each site with the median site value. Sites that were statistically different from the median site (p value <0.05) in the undesired direction were identified in Tables 2-6 to 2-25 with a bold outlined value. The performance of these sites is significantly different from the median site after adjusting for differences in veteran characteristics at entry and duration of program involvement. Sites that differed significantly from the median in the desired direction were identified with a bold underlined value.

It is important to note for this report that outliers on critical monitors are being identified on a purely statistical basis. Unlike the use of standard deviation for outlier identification, this procedure accounts for site and other differences at baseline, for baseline values of the variable in question, and for the length of time that veterans are in the program. It is a more rigorous and conservative approach. For variables where all site values are close together, no outlier may be identified. For variables where site values are skewed, outliers may be identified in one direction but not the other. For variables where site values are normally distributed, a balanced number of outliers may occur in both directions using values adjusted for baseline characteristics, baseline values, and total time in program

Minimum Program Standards

VHA Directive 2000-034 establishes procedural guidelines for MHICM teams. These have been operationalized in eight **minimum program standards**, which serve to complement the critical performance monitors. Minimum standards and threshold values include:

- Percent of veterans with psychotic diagnosis at entry *(50% or more)*
- Percent of veterans with 30 or more psychiatric inpatient days in year before entry *(50% or more)*
- Mean adjusted face-to-face contacts per week/veteran *(1.0 or more)*
- Ratio of veterans to clinical FTEE (mean caseload) *(7:1 to 15:1)*
- Percent of veterans for whom at least 60% of contacts occur in community setting *(50% or more)*
- Percent of veterans receiving psychiatric rehabilitation or skills training services *(25% or more)*
- Percent of veterans discharged from MHICM program *(< 20%)*
- Number of clinical service providers on the team *(4.0+ FTEE).*

Summary of Outliers. **Tables 2-27** summarizes the number of Critical Monitor outlier

values identified for each site in the four major evaluation domains: program structure, client characteristics, program process and outcome. Critical Monitor outlier values are presented separately by domain in **Tables 2-28 to 2-31**. Outliers for the Minimum Program Standards are presented in **Table 2-32**. Data have been made available to sites for their review and consideration, and discussed on national conference calls. NEPEC staff have followed up with individual sites concerning specific outlier variables, and these discussions will continue as program evaluation and planning progresses during the coming year.

Team Outlier Review. Following publication of the FY 1999 MHICM Performance Monitoring Report and identification of MHICM Minimum Program standards in 2000, teams were asked to review and comment on monitors for which their team value was identified as an outlier in the undesired direction. A similar process was followed for the present report. Draft tables were posted on an internet web site for access by MHICM teams and for review and comment of outliers. Outlier review responses are summarized in **Table 2-33**. The outlier review request and form are included in **Appendix C**.

Program Structure

MHICM Sites, Resources, and Expenditures

The forty-six MHICM teams in operation during FY 2000 are listed in **Table 2-2**, and characterized by Site Type and Cohort (year of program start-up). The original MHI demonstration programs (Cohort 1) began in 1987. Programs at Chicago (West Side), Miami, and Portland, initiated in 1992, grouped in Cohort 2, were funded primarily by reallocating resources from three original IPCC teams that had been discontinued for incomplete implementation of the program model. Dissemination sites were funded in 1994 (Cohort 3) and 1995 (Cohort 4), as part of VA's National Initiative for Veterans with Serious Mental Illness. Four orientation and training sessions were conducted with the thirty dissemination sites between August 1994 and July 1995. Miami staff attended the first orientation and training session with Cohort 3.

With decentralization of VA resources to 22 Veterans Integrated Service Networks in 1996, individual facilities and networks became the source for funding and implementing new IPCC teams. The first locally funded and nationally monitored IPCC team was initiated by the John D. Dingle VA Medical Center in Detroit, Michigan in 1997. Additional teams were started with network resources by the VA Health Care System of Ohio (VISN 10) in 1998 and with local resources by the Central Iowa Healthcare System in 1999 and the Rocky Mountain Healthcare Network (VISN 19) in 2000. In each case, the MHICM Project Director and NEPEC evaluation staff collaborated with an established MHICM team to provide orientation and training for new team members and sustained contact with each group during the first year of start-up. Accessible mentor-monitor teams were assigned to observe team operation and service delivery, and consult on clinical and administrative questions. Regular conference calls were held with representatives from new teams to support network communication about MHICM and community service needs of veterans with serious mental illness.

VHA policy in recent years has sought to diminish historical differences between General Medicine and Surgery (GM&S) and former Neuro-Psychiatry (NP) facilities. To illustrate the

influence of facility type on the client population and therapeutic emphasis of individual MHICM teams, we continue to compare client characteristics for the two facility groups. The proportion of teams located at NP sites (15 of 46 or 33%) in FY 2000 is slightly higher than in the original study (3 of 10 or 30%). The proportion of total veterans at NP sites has also grown slightly, from 40% (183 of 454) to 45% (1395 of 3120) in FY 2000, reflecting greater numbers of veterans who meet MHICM criteria at NP sites.

Initial resource allocations to current MHICM sites are enumerated in **Table 2-3.** Resources for Cohorts 1 and 2 are presented in 1988 and 1993 dollars, respectively, and exclude funds for local administrative support as none were provided until 1994. Cohort 1 programs involved more diverse treatment models and staffing configurations. Original site resources reported in annual progress reports bring the total funds for MHICM programs in the most recent fiscal year (2000) to almost $15M, with 86% of funds going to cover personnel costs, and the remainder going to All Other expenses.[3]

MHICM program expenditures for FY 2000, derived from site-generated annual progress reports, are summarized in **Table 2-4.** These data appear to accurately reflect expenditures for program staffing and operation at most sites during that period, although it was not possible to verify program funds recently merged with those of other services in mental health service line consolidations. Nationally, MHICM program expenditures accounted for almost $15.3M during FY 2000, with $14.5M (94%) expended as Personal Service funds for 240.5 FTEE. This amounted to an average cost of $60,175 per filled FTEE.

Table 2-5 presents the assignment and utilization of staff resources through FY 2000. Although most MHICM positions (approximately 84%) were filled, 19 sites (43%) had at least one vacancy of more than 6 months as of September 30, 2000. Fourteen of twenty-six teams (54%) with extended vacancies in FY 1999 still had unfilled positions at the end of FY 2000, indicative of enduring staff losses. In addition, MHICM staff at eleven sites (25%) were detailed without replacement for more than six months to other units. On the plus side, MHICM teams at six sites (14%) benefited from local contributions of additional staff resources.

Four of five staff in filled MHICM positions (247 of 295 FTEE or 84%) provided direct clinical services, primarily in community settings. This figure included team leaders, who were expected to provide a reduced level of community services, but excluded psychiatrists (about 10 FTEE), who generally devoted less than one day per week to MHICM veterans and rarely provided services in the community, and administrative-clerical support staff.

Caseload Levels

Clinical staffing levels and caseloads attained by each program for FY 2000 are shown in **Table 2-6.** Medical Support refers to the active involvement of psychiatrists and nurses as part of a multidisciplinary team. Most teams maintained the direct involvement of a psychiatrist and a

[3] In recognition of administrative costs associated with support for an IPCC team, each dissemination site received an increment of 10%, based on Personal Service dollars, for unmonitored administrative use.

nurse on the team. Clinical staffing levels varied considerably across sites, from less than 2.0 FTE at Mountain Home, San Francisco and Spokane to 8.0 or more FTE at Bedford, Canandaigua and North Chicago (including locally contributed resources). Caseload levels also varied among sites, with 2 of 46 teams (4%; Mountain Home, Spokane) failing to attain individual caseloads at the minimum recommended level of 7 per clinical FTE and 19 teams (41%) managing caseloads **above** the specified maximum level of 15 per clinical FTEE, as of September 30, 2000. Several teams maintained lower caseload levels to preserve the program's intensity of service in the face of persistently unfilled clinical positions.

Client Characteristics

Demographics and Entry Criteria

Socio-demographic characteristics for MHICM veterans through FY 2000 are presented in **Table 2-7**, for all sites combined (Overall) and by Site Type (GM&S, NP). Current data are comparable to those reported in the original two-year MHI study (Rosenheck and Neale, 1998a; Rosenheck et al., 1995), but with greater proportions of female and Hispanic veterans, and older veterans (age mean: 49 years; median: 48 years) in the current group. One in five veterans (21%) reported exposure to combat. Few (13%) reported paid employment in the three years preceding program entry. Site Type differences are also consistent with those reported in the original multi-site study, with veterans from former Neuro-Psychiatric facilities more likely to be older and somewhat more disabled.

Tables 2-8 and 2-9 present Overall, Site Type, and Site data characterizing MHICM veterans at entry. Sites varied in their definition and implementation of MHICM entry criteria. FY 2000 national MHICM program standards called for each veteran to meet the following criteria: 1) primary psychiatric diagnosis, especially a psychotic disorder; and 2) 30 or more days OR 3 or more stays of VA psychiatric inpatient hospitalization during the year preceding program entry. These criteria were selected and monitored to ensure that resource-intensive MHICM programs targeted veterans with the greatest need for intensive support and the greatest opportunity for VA cost savings. As in the original demonstration, the current overall population of MHICM veterans met target criteria defining veterans with serious mental illness who are high users of VA psychiatric resources. All program participants had a primary DSM-IV psychiatric diagnosis and 82% had been hospitalized for a month or more in the year preceding entry. One in five veterans (21%) was diagnosed with a co-morbid substance abuse disorder. System-wide declines in lengths of stay have reduced the proportion of veterans meeting utilization criteria. As a result, current MHICM veterans spent an average of 104 days (±107 days) in the hospital in the year prior to entry, compared with 135 days {-23% difference} for the 1997 Report (Rosenheck et al., 1997) and 144 days {-28%} for the original demonstration (Rosenheck and Neale, 1998a). The percentage of veterans entering the program directly from a VA psychiatric inpatient unit declined sharply (from 98% to 52%) after 1997. The number of veterans who met the 30-day hospital use criterion in the year prior to program entry also declined, from 91% to 82%.

Disability Status

Disability income data, presented by site in Table 2-9, reveal extensive VA and Social Security support for psychiatric disabilities among MHICM veterans at entry. More than half of MHICM veterans (N=1800 of 3120, 57.7%) reported receiving VA compensation for a service-connected disability. Of these, 1407 (45.1%) veterans were exclusively service-connected for a psychiatric disorder, 374 (12.0%) exclusively for a physical disability, and 184 (5.9%) for both. Another one in five (N=518, 16.6%) veterans reported receiving a non-service-connected disability pension. Many veterans also reported receiving Social Security income (SSI: 14.7%; SSDI: 48.6%). More than nine of ten MHICM veterans (N=2898, 92.9%) reported receiving some combination of VA and/or Social Security funds, and almost half (48.6%) said their funds were handled by a designated representative payee. Separate examination of Veterans Equitable Resource Allocation (VERA) patient class data in FY 1998 indicated that many MHICM veterans were included in Complex Class reimbursement categories for serious mental illness. Although the percentage of MHICM veterans who received VA compensation for a service- connected disorder ranged from 34% to 87% across sites, the proportion of veterans receiving some form of disability support was consistently high, from 79% to 100%.

Program Adherence to Entry Criteria

Overall, MHICM teams demonstrated substantial adherence to prescribed entry criteria, presented in **Table 2-10**, despite facility differences on specific variables. Most veterans (81.6% ± 20.6%) met the 30-day criterion for psychiatric hospital use in the year preceding entry and most (77.7% ± 12.2%) had a psychotic diagnosis at entry. One in five veterans (20.9% ± 11.8%) had a secondary diagnosis of alcohol or drug abuse and only Bedford specifically targeted so-called "dually diagnosed" clients. While over half of MHICM veterans (57.7% ± 21.7%) had received at least two years of inpatient psychiatric or substance abuse treatment, there was substantial Site Type variation (range: 13.2% to 90.2%). Characteristic of psychotic disorder onset in early adulthood, veterans reported histories of illness that typically spanned more than two decades since their first hospitalization (mean = 22.5 ± 4.1 years; range: 9.8 to 31.6 years).

Measures of clinical status at program entry, shown in **Table 2-11**, indicate high levels of client symptoms and functional impairment commensurate with extensive hospitalization and long-term mental illness. More than half of MHICM veterans (54.7% ± 12.4%) reported low-level instrumental functioning on at least one activity of daily life (managing household chores, shopping, finances, medications). Despite accommodations to inpatient life by many veterans prior to entry, clinician ratings of global functioning at program entry were low (GAF mean: 40.8 ± 5.9) and interviewer ratings of observed symptoms were relatively high (BPRS mean: 39.2 ± 6.3), reflecting mild to moderate psychiatric impairment. (Note: BPRS ratings were re-scored on a 1-Not Present to 7-Extremely Severe scale to conform with scoring guidelines and current reporting conventions.)

Program Process

Program Tenure

MHICM principles emphasize continuity, frequency, intensity, and community-based services for veterans with serious and persistent mental illnesses who have not responded well to traditional modes of treatment. With respect to continuity, MHICM programs are expected to serve as a fixed point of clinical responsibility for their veterans, offering services for at least one year and providing services for as long as clinically necessary. Continuity data in **Table 2-12** indicate that MHICM programs have generally met this expectation. A relatively small percentage (N=368, 11.8%) of all MHICM veterans (N=3120) were terminated during the twelve-month report period. Of terminated veterans, more than half (N=202, 54.8%) moved out of the area and another 21.0% (N=77) were deceased from natural (N=74) or self-inflicted (N=3) causes. The remainder (N=89, 24.2%) were discharged for clinical, personal, or other reasons. On average, veterans in the report sample (those with a follow-up interview between October 1, 1999 and September 30, 2000) had participated in the program for almost three years (mean=995 ± 368 days) at the time of the latest follow-up interview.

Service Delivery and Alliance

Table 2-13 presents information provided by MHICM case managers through structured semi-annual case summaries on MHICM service delivery. These data support national program implementation according to principles that have been shown to result in positive outcome (Rosenheck and Neale, 1998a; McGrew et al., 1994). With respect to frequency of contact, 84.7% (±10.6%) of veterans were seen weekly or more and 59.4% (±15.5%) received telephone contacts on a weekly or more frequent basis. Regarding intensity of contact, 66.7% (±16.6%) of veterans were seen for more than an hour per week in the latest six-month period (after a mean of almost 3 years in the program). Pertaining to location of contact, 87.2% (±11.9%) of veterans received more than 60% of their care in the community. Each of these values reflects a noticeable improvement over values from the FY 1999 report (Neale et al., 2000).

An important aspect of MHICM treatment involves the volume of direct, or face-to-face, contact between staff and clients, recorded as clinic stops in VA's centralized outpatient database, the Outpatient Clinic or OPC File (DSS Identifiers #552 and #546). Overall, as illustrated in **Table 2-14**, each MHICM client had an average of 72 (±48.7) visits by MHICM staff in the twelve months preceding September 30, 2000, and another 6 (±10.3) telephone contacts, for a cumulative national total of 224,975 visits. Adjusting visits to reflect the portion of the year that clients were enrolled in the program (mean = 87% ± 12%) at each site amounts to about 75 (±44.3) face-to-face visits over twelve months or 1.45 visits per week, per veteran. Including telephone contacts, each veteran received about 83 contacts, or 1.60 contacts per week, in FY 2000. This is below the program expectation of 2-3 contacts per veteran per week. Overall, visits per veteran declined (about 13%) over the previous year despite no change in the proportion of the year (87%) that clients were enrolled in the program. The decline was widespread, with 70% of teams reducing client contacts compared with FY 1999. Asked to comment on these data, sites provided a variety of responses, including: administrative pressure to increase caseloads; recent or incomplete conversion to new workload reporting systems (DSS, CPRS); inappropriate credit of MHICM

workload to another clinic or non-MHICM physician; exclusion of credit for visits while a veteran was an inpatient; and workload reporting changes related to VA Medical Care Cost Recovery from the Health Care Financing Administration.

Table 2-15 depicts the breadth of services provided by MHICM clinicians to program veterans during FY 2000. Most frequently, clients received supportive contact (96%), active monitoring (93%), medication management (78%), and psychotherapeutic interventions (75%). Less frequently, staff provided medical screening (63%), crisis intervention (68%), social or recreational activities (57%), and housing support (56%). Staff were even less likely to provide rehabilitation (36%) services, but asked for clarification and training regarding this service area. Overall, the pattern of service delivery was consistent with the FY 1999 report. Substance abuse intervention (32%) was generally limited to veterans with specific needs related to dual diagnosis. Vocational support (24%) was the least used service with this severely disabled population.

Clinical case management models stress the importance of the therapeutic relationship between case manager and client, based on frequent and individualized contact, for improving clinical status (Harris and Bergman, 1993; Kanter, 1989). On the basis of earlier retrospective evidence linking therapeutic alliance with MHICM outcomes (Neale and Rosenheck, 1995), case manager-client alliance was monitored at all dissemination sites using seven-item versions of the Working Alliance Inventory that had been modified to reflect case management work (Horvath and Greenberg, 1989). **Table 2-16** compares MHICM client perceptions of their alliance with MHICM case managers at six months (Alliance mean: 39.3 ± 3.4) to adjusted ratings of alliance with traditional inpatient/outpatient treaters at entry (Alliance mean: 35.8 ± 2.2). Overall, client ratings of alliance were almost 10% higher for MHICM staff than for traditional treaters, with veterans at 42 of 44 sites (95%) reporting higher levels of alliance with MHICM staff.

ACT Model Fidelity

Each MHICM team completed a measure of program fidelity to prescribed elements of assertive community treatment, the Dartmouth Assertive Community Treatment scale (DACTS; McGrew et al., 1994; Teague et al., 1998). The measure examines team conformity with ACT program criteria pertaining to human resources, organizational boundaries, service delivery, and substance abuse treatment. Previous research has found that fidelity scores, particularly team factors, correlate strongly with reductions in hospital use (McGrew et al., 1994), and distinguish between effective and ineffective treatment teams (Teague et al., 1995). Results for MHICM programs, displayed in **Table 2-17**, show that teams performed well on three of the four dimensions. The fourth dimension of the scale pertains to substance abuse treatment, which is not a primary emphasis of MHICM treatment, and results vary significantly by team. Although secondary substance abuse diagnoses are present in 20-25% of MHICM veterans at entry, a primary substance abuse diagnosis is an exclusion criterion for all but one MHICM team. The overall average DACTS score (mean = 4.0 ± .3) approximates those for other successful public sector ACT teams (Teague et al., 1998), despite including some teams that have shifted MHICM staff to other models of care. More than half (24 of 43, 56%) of MHICM teams achieved a score of 4.0 or more on the ACT Fidelity scale. [Note: FY 2000 DACTS scores were based on a revised scale with three fewer items, resulting in lower total scores.]

Distance and Travel Time

For the semi-annual Clinical Progress Reports, MHICM clinicians estimated the distance and travel time between their offices and each veteran's residence. Follow-up reports indicated that most MHICM clients lived within 20 miles (N=1218, 66.9%) and 30 minutes (N=1224, 68.2%) of team offices (see **Figures 2-1 and 2-2**). Nevertheless, sizable numbers of veterans lived between 21 to 40 miles (N=355, 19.5%) and 30 to 60 minutes (N=450, 25.1%) away, and some lived more than 40 miles (N=246, 13.5%) and 1 hour (N=118, 6.6%) away. These data suggest that MHICM teams have substantially extended access to VA mental health services for veterans with serious mental illness through their outreach activities.

Clinical Outcomes

Reduction in VA Hospital Use

A primary objective of MHICM teams is to reduce veteran reliance on psychiatric inpatient services in favor of more adaptive and less costly treatment alternatives. As evident in **Table 2-18**, this objective was well met, with all teams showing pre- to post-entry reductions in mental health hospital days after six months. Two of the six teams with the least impact on hospital days were based at outpatient clinics without immediately available hospital beds. On average, MHICM veterans (N=2487) reduced their VA psychiatric hospital use from 64.4 days pre-entry to 17.3 days post-entry (mean reduction = -47 ± 30.8 days) during their first six months in the program. Overall, hospital use reductions of the same magnitude (73%) were observed for periods of 12 months (**Table 2-18a**: N=2203, -79 days), 18 months (**Table 2-18b**: N=1970, -114 days), and 24 months (**Table 2-18c**: N=1751, -148 days)[4]. As in the original demonstration (Rosenheck and Neale, 1998a), NP teams continue to show greater reductions and cost savings relative to GM&S teams, although GM&S teams have been consistently effective in recent implementations.

One estimate of MHICM cost impact can be obtained by multiplying mean reduction in days by the number of veterans and again by the national average hospital per diem rate (FY 2000 inpatient psychiatry per diem = $690) (Rosenheck et al., 2001). This method yields estimated overall cost reductions of $80.9M for 2487 veterans at 6 months and $119.9M for 2203 veterans at 12 months, unadjusted for inflation. Although some reduction in hospital use is certainly attributable to expected client improvements over time and course of illness and to system-wide reductions in hospital use, the data suggest substantial cost reductions for veterans with serious mental illness who receive MHICM services.

Improvement in Clinical Status

[4] Paired t-tests revealed overall reductions in VA mental health hospital days to be statistically significant at 6 months (N=2465, mean difference=-47.94, t=-39.28, p<0.0001), 12 months (N=2180, mean difference=-80.13, t=-33.82, p<0.0001), 18 months (N=1958, mean difference=-115.45, t=-31.63, p<0.0001), and 24 months (N=1747, mean difference=-149.20, t=-29.43, p<0.0001).

Consistent with the MHICM mission and objectives, monitored outcomes include improvements in health status, community functioning, and quality of life, as well as customer satisfaction. Outcome measures include ratings of:

- Symptoms by clinician: Brief Psychiatric Rating Scale {BPRS}, Overall and Gorham, 1962;
- Symptoms by client: Symptom Severity {GSI}, Derogatis and Spencer, 1982);
- Global functioning by clinician: Global Assessment of Functioning {GAF}, American Psychiatric Association, 1995, Endicott et al., 1976;
- Instrumental functioning by client: Instrumental Activities of Daily Living {IADL}, Fischer et al., 1996);
- Quality of life by client: Lehman Quality of Life Inventory {QOL}, Lehman, 1988);
- Satisfaction with VA mental health {VAMHSAT} and MHICM services {MHICM SAT} by client.

For each outcome measure, scores at program entry were compared with scores for the latest 6-month follow-up period in the report window (October 1, 1999 to September 30, 2000). Median time in MHICM at that point was 35 months. These data are presented in Tables 2-19 to 2-25.

Case manager ratings of observed symptoms (BPRS) for MHICM clients, summarized in **Table 2-19,** showed an overall reduction of 10.0% from entry (N=2547, mean sum: 39.2 ± 6.4) to follow-up (mean sum: 34.9 ± 10.8). Observed symptoms decreased at 34 of 44 sites (77%). Client ratings of severity for 30 symptoms on a 4-point scale (GSI: 1-not at all to 4-a great deal) (Fischer et al., 1996), presented in **Table 2-20**, yielded a comparable overall reduction of 11.0% from entry (N=2226, mean: 1.99 ± 0.2) to follow-up (mean: 1.78 ± 0.3), with lower 6-month ratings at all but two sites (95%).[5]

Reduction in Violent and Suicidal Behavior

MHICM veterans were asked whether they had thought or talked about harming someone, threatened anyone, or actually harmed anyone during their last 30 days in the community. Clients were also asked whether they had been arrested or had spent a night in jail, for any reason, during the six months preceding the interview. Entry and follow-up responses are presented in **Figure 2-3**. At entry, one in five veterans (N=460, 18.7%) reported thoughts of violence, one in seven (N=324, 13.2%) talked about hurting someone, one in ten (N=237, 9.5%) threatened someone, and one in twenty-five (N=101, 4.1%) committed a violent act. At follow-up, levels of violence were substantially lower across all categories, with twenty-eight percent fewer veterans reporting violent thoughts (N=249, 13.6%), thirty-seven percent fewer veterans reporting violent talk (N=151, 8.3%) and almost fifty percent fewer veterans reporting violent threats (N=95, 5.2%) or actions (N=39, 2.1%). The number of veterans reporting arrest (pre: N=230, 9.1%; post: N=62, 3.2%) or jail (pre: N=162, 6.4%; post: 53, 2.8%) also declined, by more than half, at follow-up.

[5]Paired t-tests yielded significant differences reflecting improvement in both observed (N=1899, mean difference: -3.94, t=-10.36, p<0.0001) and reported symptoms (N=1556, mean difference: -0.21, t=-13.05, p<0.0001).

Using similar items, MHICM veterans were asked if they had thought or talked about harming or killing themselves, threatened or attempted suicide in their last 30 days in the community, and whether a suicide attempt had resulted in hospitalization for medical reasons (see **Figure 2-4**). Though more than one quarter (N=597, 24.2%) of veterans reported thinking about suicide prior to entry, and one seventh (N=345, 13.8%) had talked about it, less than one veteran in ten had threatened (N=184, 7.4%) or attempted (N=122, 4.9%) suicide. Of the latter, most (N=112, 91.8%) had been hospitalized for medical reasons. At follow-up (after about 28 months in the program), the number of veterans in all of these categories had declined substantially. Veterans were much less likely to report suicidal thought (N=193, 10.6%), talk (N=94, 5.1%), threat (N=39, 2.1%), or attempt (N=17, 0.9%). All veterans who attempted suicide were hospitalized for medical reasons. It is worth noting here that over a one-year period, 3 (0.2%) of the 3120 veterans targeted in this report died from a completed suicide attempt. Another 22 veterans (1.2%) died from natural causes.

Global and Instrumental Functioning

Case manager ratings of client global functioning (GAF) are presented in **Table 2-21.** Adoption of the measure as a national performance monitor for VA mental health in 1998 prompted facilities around the country to train staff in use of the measure, often resulting in a more conservative scoring range. As a result, follow-up scores were generally lower (28 of 44 sites, 64%) and overall means decreased by 4.9% from pre- (N=2543, mean: 40.8 ± 6.0) to follow-up (mean: 38.9, S.D.: 11.0). This compared with higher follow-up scores (25 of 40, 63%; mean increase: 3-4%) over six months in the first MHICM report (Rosenheck et al., 1997), and a statistically significant t-test difference (N=1977, mean difference: -4.14, t=-13.00, $p<0.0001$).

Client ratings of performance frequency (1-almost never to 5-almost always) for twelve specific daily skills (IADL), presented in **Table 2-22**, improved slightly (+2.2%) from entry (N=2132, mean sum: 43.6 ± 3.6) to follow-up (mean sum: 44.8 ± 6.0). Three out of five teams (28 of 44, 64%) showed some level of improvement at follow-up, yielding marginally significant t-test results (N=1330, mean difference: 0.83, t=2.90, $p<0.0037$).

Enhanced Quality of Life and Independence

Client ratings on five life satisfaction items (QOL; Lehman, 1988) using a 7-point scale (1-terrible to 7-delighted), reported in **Table 2-23**, indicated improvement (11.0%) from entry (N=2445, mean sum: 25.7 ± 1.6) to follow-up (mean sum: 28.5 ± 2.1). Clients from all 44 teams (100%) reported higher quality of life following MHICM entry[6].

Veterans were asked to indicate the number of nights in their most recent month in the community that they had spent in any of five living situations: a) **independent** (alone or with spouse, family, or friend in apartment or house); b) **minimally restrictive** (supervised apartment,

[6]Paired t-test results for client ratings of quality of life (N=1730, mean difference: 2.75, t=17.64, $p<0.0001$), satisfaction with VA mental health services (multi-item: N=1464, mean difference: 1.50, t=22.74, $p<0.0001$); single item: N=1316, mean difference: 0.30, t=8.23, $p<0.0001$), and satisfaction with MHICM services (N=1619, mean difference: 0.62, t=20.45, $p<0.0001$) were all significantly positive.

boarding home, adult foster care); c) **moderately restrictive** (halfway house, treatment program, acute psychiatric diversion facility, treatment lodge, domiciliary); d) **extremely restrictive** (psychiatric hospital, skilled nursing facility, jail, or prison); or e) **homeless** (homeless or emergency shelter). Most MHICM veterans reported living in independent (N=1161, 56.7%) or extremely restrictive (N=783, 38.3%) residences in the month preceding their index hospital stay (or program entry) (see **Figure 2-5**). Fewer veterans reported living in minimally (N=461, 22.5%) or moderately restrictive (N=213, 10.4%) residences or having been homeless (N=1029, 5.8%). At follow-up, the number of veterans who had been homeless (N=18, 0.9%) or in extremely restrictive residences (N=197, 10.1%) declined by more than seventy percent. Although sixty-five percent more veterans reported living in minimally restrictive residences (N=725, 37.1%), fourteen percent fewer veterans reported living in independent residences (N=954, 48.8%) and fifteen percent fewer reported living in moderately restrictive residence (N=172, 8.8%).

Using the items described above, an index of housing independence was created for this report to compare client housing status before and after program entry. Client reported days spent at each level of housing independence were multiplied by a corresponding weight (Independent x 4, Minimally restrictive x 3, Moderately restrictive x 2, Extremely restrictive x 1, Homeless x 0). Comparison of client ratings, presented in **Table 2-23a**, revealed a statistically significant 15.1% gain in housing independence from pre- (N=2375, mean = 2.8 ± 0.5) to post-entry (mean = 3.2 ± 0.6) (N=1805, mean difference: 0.44, t=13.98, p<0.0001).

Work and Rehabilitation Activity

A minority of MHICM veterans (N=354 of 2675, 13.2%) reported a full- or part-time work history in the three years preceding program entry. Fewer veterans (N=201, 7.6%) reported paid employment in the month preceding MHICM program entry (see **Figure 2-6**) with an average of 1.02 days of paid employment at entry and 1.13 days at follow-up. Small numbers reported work as volunteers (N=133, 5.0%), or participation in "work-for-pay" (N=93, 3.7%) or formal (N=58, 2.3%) vocational rehabilitation programs. Notably, there was little change, at follow-up, in the proportion of veterans reporting paid employment (N=154, 7.9%). Participation in volunteer service (N=70, 3.6%) actually declined, while the numbers reporting "work-for-pay" (N=118, 6.0%) or vocational rehabilitation (N=83, 4.4%) rose slightly. Overall, the number of unique participants in any work or rehabilitation activity declined from 393 veterans at entry to 321 at follow-up. The poverty of vocational outcomes for MHICM programs may reflect: 1) the absence of staff with vocational rehabilitation expertise on MHICM teams; 2) severe levels of impairment among MHICM veterans; and 3) low motivation to work among MHICM clients who received extensive VA and Social Security benefits for disability. Anecdotally, some MHICM staff reported that their clients were "too disabled" or "unmotivated" to work and were refused admission by vocational rehabilitation services.

Enhanced Satisfaction with VA Mental Health Services

Client ratings of the overall quality of VA mental health services (VAMHSAT, 3 items), presented in **Table 2-24**, revealed a statistically significant 17.6% gain from pre- (N=2130, mean: 8.8 ± 0.8) to post-entry (mean sum: 10.1 ± 0.9). Single-item comparison between client satisfaction with MHICM and general VA mental health services using a 5-point scale (0-very

dissatisfied to 5-very satisfied), summarized in **Table 2-25**, found program participants favoring MHICM (N=2310, mean: 3.1 ± 0.3) by about 20% over general services (mean: 3.7 ± 0.4). MHICM services, comprising the bulk of psychiatric care for most program clients, appear to have had a positive impact on client satisfaction with general VA mental health services, which rose 11.2% (Entry mean: 3.1 ± 1.1) during the first 6 months of program involvement.

Unit Costs

As its name suggests, Mental Health Intensive Case Management involves providing extra-ordinary services to veterans who are among the most seriously ill and among the most expensive to treat in the VA system. The extent of care required by this group, and variation in the setting where services are delivered, have prompted relatively low recommended caseload levels which, in turn, contribute most heavily to personnel and program expenses. Using FY 2000 program expenditures and data presented in previous tables, **Table 2-26** outlines preliminary program cost data for various units of service. For 2940 veterans seen during FY 2000, for example, MHICM services cost about $5,214 per veteran per year, comparing favorably with original study data adjusted for inflation (Rosenheck, Neale, and Frisman, 1995). On the basis of filled positions (240.51 FTE) and FY 2000 personal service expenditures ($14.5M), the average annual cost per FTE is $60,175. Adjusting total MHICM visits to reflect a full year of service for each veteran (a cumulative total of 244,487 visits per year), the cost per visit was about $63.

Outlier Review

Beginning in FY 2000, MHICM teams were asked to review critical monitors and minimum standards for which their site was identified as an outlier value (i.e., the team value did not meet the minimum standard threshold value, exceeded the site standard deviation in the undesired direction, or was statistically different from the median site in the undesired direction). Minimum standards were based on VHA Directive 2000-034 and critical monitor outliers were based on MHIM program guidelines and principles. For each outlier on a Critical Monitor or Minimum Standard, the team was asked to identify a reason for outlier status from among five options and to explain and address it. The Outlier Review request and form are included in **Appendix D**.

Outlier values are heavily outlined (or boxed) in report tables. Critical monitor outliers are summarized by site across monitoring domains in **Table 2-27** (Site Performance) and within domains in **Table 2-28** (Team Structure), **Table 2-29** (Client Characteristics), **Table 2-30** (Clinical Process), and **Table 2-31** (Client Outcome). Minimum standards outliers are summarized by site in **Table 2-32**. Team outlier review responses are summarized in **Table 2-33** (Outlier Review Summary) and briefly described here.

Three teams operating in FY 2000 had no outlier values: Ann Arbor, Canandaigua, and Detroit. Three teams did not submit a review. Overall, 43 of 46 (93%) teams had at least one outlier value, with 139 outliers in all. Site reviews favored four of the five response options, including (in order of frequency): (C) Problems in program implementation for which corrective action has been taken (Sites: 24 or 60% of responding sites; Responses: 42 or 30% of outliers); (A) Legitimate team differences that do not conflict with national program goals (Sites: 24 or 60%;

Responses: 35 or 25%); D) Problems in program implementation for which corrective action has been planned (Sites: 14 or 35%; Responses: 22 or 16%); and (B) Local policies that may conflict with national program goals (Sites: 14 or 35%; Responses: 17 or 12%).

In summary, outliers were most commonly found in the Team Structure domain (65 outliers among 39 sites), followed by Clinical Process (52 outliers among 29 sites), Clinical Outcome (20 outliers among 17 sites), and Client Characteristics (11 outliers among 11 sites). Specifically, outliers were most common for Team Size (22), FTE Unfilled (22), Face-to-face Contact (20), Caseload Size (17), and Rehabilitation Services (16), and less likely for Location (1), Quality of Life (1), Reported Symptoms (2), or Client entry characteristics. These results underline team reports of their difficulties maintaining sufficient staffing and small enough caseloads to provide intensive services, and their needs for staff training in the provision of psychosocial rehabilitation services.

Case Management Summary

VHA Directive 2000-034 identified High and Low levels of mental health case management services for veterans. MHICM workload, representing the High Intensity level of care (2-3 visits per week or more), is reported in VA outpatient databases under DSS Identifier or Stop Code 552 (MHICM). Less Intensive services (weekly or less often) are reported under DSS identifier 546 (General Case Management). As mandated by the Directive, NEPEC has begun monitoring facility and VISN workload for both levels of care. FY 2000 data on the numbers of veterans and totals for each level of care are reported, by facility and VISN, in **Appendix E**. A total of 5,122 veterans received a mean of 30.5 (± 23.0) High Intensity or MHICM visits during the year. These visits were spread across 73 facilities, with most occurring at the 50 sites with monitored MHICM teams. By contrast, 2,272 veterans received an average of 3.4 (± 4.2) Low Intensity (General Case Management) visits at 33 facilities that, for the most part, did not have monitored MHICM teams. A more detailed summary will be presented in the FY 2001 Report.

Summary and Conclusions:

Development of Mental Health Intensive Case Management programs in VA has followed a model sequence of problem identification, program development, evaluation, and dissemination (Rosenheck, under review). Modeled on evidence-based, “best practice” programs in widespread use elsewhere in the nation (Rosenheck and Neale, in press; Phillips et al., 2001), the MHICM program is a well-defined intervention that can be varied to meet local needs within its broad operational parameters. A rigorous study demonstrated the program’s cost-effectiveness and long-term benefits in VA settings, as well as the need for training and monitoring to assure proper implementation. Both VA and non-VA studies show program benefits are not likely to be attained unless implementation is carefully monitored (Mueser et al., 1998). MHICM has been successfully disseminated to more than 50 VA medical centers and site-by-site performance monitoring data show it continues to provide effective and efficient services to deserving veterans in great need. Preliminary review of outliers and team reports underscore needs for attention to team and caseload size and staff training.

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Table 2-1. VA MHICM Program Monitors

Monitoring Domain	Program Monitor	Unit	Report Table	Program Objective	Critical Monitor
I. Structure	1. Total FTE allocated to date	#	2-3	1	
	2. Actual FTEE filled (September 30,2000)	#	2-5	1	
	3. % FTE utilized	%	2-5	1	
	4. Total funds (PS, AO, AS, TOT) allocated	$	2-3	1	
	5. Actual funds expended (FY 2000)	$	2-4	1	
	6. Medical support (.2MD, 1.ORN)	Y/N	2-6	1	*
	7. Clinical FTEE	#	2-6	1	+
	8. FTE unfilled or lagged GTE 6 months	Y/N	2-5	1	*
	9. FTE assigned to non-MHICM activities	Y/N	2-5	1	
	10. # Total veterans enrolled (9/30/00)	#	2-6	1	
	11. Caseload size (vet/staff: 7-15/Clinical FTE)	ratio	2-6	1	*+
II. Patient	12. % Caseload entered as inpatient	%	2-8	1	
	13. % Caseload w/CLOS GTE 30 (yr of entry)	%	2-8/10	1	*+
	14. % Caseload w/psychotic diagnosis at entry	%	2-8/10	1	*+
	15. % Age at entry (by category)	%	2-7	na	
	16. % Minority status	%	2-7	na	
	17. % Dual diagnosis	%	2-8	na	
	18. Lifetime psych hospital use (% GT 2 yrs)	%	2-10	3	
	19. % Receiving public support (any source)	%	2-8/9	1	
	20. % Receiving VA compensation or pension	%	2-8/9	1	
	21. % Employed (FT/PT) in past 3 years	%	2-7	1	
	22. Global functioning at entry (% GAF GTE 50)	%	2-11	4	*
	23. IADL skills (% domains rarely/never)	%	2-11	4	
	24. Severity of illness (Mean BPRS score)	#	2-11	2	
III. Process	25. # New veterans added	#	2-12	1	
	26. % Clients terminated (Continuity)	%	2-12	1	*+
	27. % Clients seen weekly + (Frequency)	%	2-13	1	
	28. % Clients seen 61mins+wk seen (Intensity)	%	2-13	1	*
	29. % Clients seen 61% + community (Location)	%	2-13	1	*+
	30. # Face-to-face contacts/wk (Adj mean/wk)	#	2-14	1	*+~
	31. % Clients seen for rehabilitation	%	2-15	4	+
	32. % Clients seen for substance abuse	%	2-15	2	
	33. % Change therapeutic alliance	%	2-16	5	
	34. % Fidelity to ACT Model	%	2-17	1	
IV. Outcome	35. # Mean VA hospital days post-entry (6 mos)	#	2-18	3	*
	36. % Change in VA hospital days (6 mos)	%	2-18	3	
	37. $ Estimated change in VA healthcare cost	$	2-18	6	
	38. % Client symptoms improved (BPRS)	%	2-19	2	*
	39. % Client symptoms improved (BSI)	%	2-20	2	*
	40. % Client functioning improved (GAF)	%	2-21	4	*
	41. % Client functioning improved (IADL)	%	2-22	4	*
	42. % Client quality of life improved (QOLI)	%	2-23	4	*
	43. % Client satisfaction: VA mental health care	%	2-24	5	
	44. % Client satisfaction: MHICM vs. VA MH care	%	2-25	5	*
V. Cost	45. $ Cost per veteran	$	2-26	6	
	46. $ Cost per FTEE	$	2-26	6	
	47. $ Cost per visit	$	2-26	6	

*Critical MHICM monitor; + Minimum program standard; ~ Minimum standard replaces critical monitor standard.

TABLE 2-2. MHICM PROGRAMS THROUGH FY 2000

VISN	SITE	SITE CODE	SITE TYPE	MHICM START-UP YEAR
1	BEDFORD	518	NP	1995
1	BROCKTON	525-523A5	NP	1987
1	TOGUS	402	GM&S	1995
1	WEST HAVEN	689	GM&S	1987
2	ALBANY	500-528A8	GM&S	1987
2	BUFFALO	528	GM&S	1987
2	CANANDAIGUA	532-528A5	NP	1987
2	SYRACUSE	670-528A7	GM&S	1987
3	BRONX	526	GM&S	1987
3	BROOKLYN	527-630GC-630A4	GM&S	1995
3	EAST ORANGE	561	GM&S	1995
3	MONTROSE	620	NP	1987
4	COATESVILLE	542	NP	1995
4	PITTSBURGH	645-646A5	NP	1994
5	PERRY POINT	641-512A5	NP	1994
6	SALISBURY	659	NP	1994
7	ATLANTA	508	GM&S	1995
7	AUGUSTA	509	NP	1995
7	TUSKEGEE	680-619A4	NP	1995
8	GAINESVILLE	573	GM&S	1995
8	MIAMI	546	GM&S	1992
9	MOUNTAIN HOME	621	GM&S	1995
10	CHILLICOTHE	538	NP	1995
10	CINCINNATI	539	GM&S	1999
10	CLEVELAND	541	GM&S	1994
10	COLUMBUS	757	GM&S	1999
10	DAYTON	552	GM&S	1999
11	ANN ARBOR	506	GM&S	1995
11	BATTLE CREEK	515	NP	1995
11	DETROIT	553	GM&S	1998
12	CHICAGO-WEST SIDE	537	GM&S	1992
12	MADISON	607	GM&S	1995
12	NORTH CHICAGO	556	NP	1995
13	MINNEAPOLIS	618	GM&S	1995
14	KNOXVILLE	592-555A4-636A7	NP	2000
17	DALLAS	549	GM&S	1995
17	WACO	685-674A4	NP	1995
19	DENVER	554	GM&S	1995
19	SOUTHERN COLORADO	567	NP	2000
20	AMERICAN LAKE	505-663A4	NP	1994
20	BOISE	531	GM&S	1995
20	PORTLAND	648	GM&S	1992
20	SEATTLE	663	GM&S	1995
20	SPOKANE	668	GM&S	1995
21	SAN FRANCISCO	662	GM&S	1995
22	WEST LA	691	GM&S	1994

New MHICM teams at Akron, Grand Junction, Salt Lake City, and Sheridan did not have sufficient data to be included in the FY 2000 Report.

TABLE 2-3. ALLOCATED STAFF AND FUNDS (ORIGINAL DOLLARS)

VISN	SITE	ALLOCATED FTE	PERSONAL SERVICE	ALL OTHER	ADMIN. SUPPORT	TOTAL PROGRAM $
1	BEDFORD^	6.20	$582,020	$15,000	$30,000	$627,020
1	BROCKTON*#	10.50	$392,315	$52,006	$0	$444,321
1	TOGUS	3.50	$200,000	$15,000	$20,000	$235,000
1	WEST HAVEN*#+	11.00	$404,862	$27,000	$14,686	$446,548
2	ALBANY*	10.00	$341,000	$1,985	$0	$342,985
2	BUFFALO*	8.50	$273,000	$12,000	$0	$285,000
2	CANANDAIGUA*#	11.60	$343,052	$42,844	$0	$385,896
2	SYRACUSE*+	4.30	$174,671	$5,200	$11,500	$191,371
3	BRONX*	5.50	$218,400	$6,600	$0	$225,000
3	BROOKLYN	6.20	$300,000	$15,000	$30,000	$345,000
3	EAST ORANGE	5.20	$260,000	$15,000	$26,000	$301,000
3	MONTROSE*#^	4.50	$225,144	$85,456	$0	$310,600
4	COATESVILLE	6.20	$300,000	$15,000	$30,000	$345,000
4	PITTSBURGH	6.50	$300,000	$25,000	$45,000	$370,000
5	PERRY POINT^	6.50	$315,326	$25,000	$45,000	$385,326
6	SALISBURY	6.50	$300,000	$50,000	$45,000	$395,000
7	ATLANTA	5.20	$260,000	$15,000	$26,000	$301,000
7	AUGUSTA	6.20	$288,052	$15,000	$28,805	$331,857
7	TUSKEGEE^	3.50	$200,000	$15,000	$20,000	$235,000
8	GAINESVILLE^	5.20	$282,500	$15,000	$26,000	$323,500
8	MIAMI	7.30	$364,456	$23,620	$25,000	$413,076
9	MOUNTAIN HOME	3.50	$200,000	$15,000	$20,000	$235,000
10	CHILLICOTHE	6.20	$300,000	$15,000	$30,000	$345,000
10	CINCINNATI	4.00	$130,000	$9,000	$0	$139,000
10	CLEVELAND	6.50	$300,000	$25,000	$45,000	$370,000
10	COLUMBUS	4.00	$130,000	$9,000	$0	$139,000
10	DAYTON	4.00	$130,000	$9,000	$0	$139,000
11	ANN ARBOR	5.20	$240,000	$15,000	$24,000	$279,000
11	BATTLE CREEK	6.20	$300,000	$15,000	$30,000	$345,000
11	DETROIT	9.30	$325,000	$75,000	$0	$400,000
12	CHICAGO-WEST SIDE**	7.30	$267,600	$24,400	$0	$292,000
12	MADISON^	3.50	$228,000	$15,000	$20,000	$263,000
12	NORTH CHICAGO^	6.20	$300,000	$15,000	$30,000	$345,000
13	MINNEAPOLIS	5.20	$260,000	$15,000	$26,000	$301,000
14	KNOXVILLE	7.85	$436,195	$14,786	$0	$450,981
17	DALLAS^	6.50	$303,107	$15,000	$28,000	$346,107
17	WACO	4.00	$163,000	$15,000	$16,300	$194,300
19	DENVER	6.20	$300,000	$15,000	$30,000	$345,000
19	SOUTHERN COLORADO	7.60	$256,396	$152,121	$0	$408,516
20	AMERICAN LAKE	6.50	$280,000	$25,000	$45,000	$350,000
20	BOISE	3.60	$236,000	$8,100	$23,600	$267,700
20	PORTLAND**	7.00	$268,000	$19,500	$0	$287,500
20	SEATTLE	5.20	$260,000	$15,000	$26,000	$301,000
20	SPOKANE	3.50	$200,000	$15,000	$20,000	$235,000
21	SAN FRANCISCO	6.50	$300,000	$15,000	$30,000	$345,000
22	WEST LA	6.50	$300,000	$25,000	$45,000	$370,000
	ALL SITES	282.15	$12,738,096	$1,082,618	$911,891	$14,732,605
	SITE AVERAGE	6.13	$276,915	$23,535	$19,824	$320,274
	SITE STD. DEV.	2.00	$80,746	$24,984	$15,207	$90,286

* ORIGINAL SITES: Listed resources from 1988 - No Administrative Support funds.
** CHICAGO/PORTLAND: 1993 Progress Report - No Administrative Support funds.
# MENTOR-MONITOR SITE: 1.0 FTE AWARDED IN FY 1994
+ SUPPLEMENTARY FTE AWARDED IN FY 1994
^ Additional FTEE provided by Medical Center.
REMAINING SITES: FY 1995 Resource tables (MHSHG)

TABLE 2-4. FY 2000 PROGRAM EXPENDITURES

VISN	SITE	FY 2000 FILLED FTE	FY 00 P/S Expend.	FY 00 AO Expend.	FY 00 Total Expend.
1	BEDFORD*	9.75	$720,914.00	$14,519.00	$735,433
1	BROCKTON	9.00	$541,017.00	$41,060.00	$582,077
1	TOGUS	3.25	$226,387.00	$9,429.00	$235,816
1	WEST HAVEN	6.03	$411,534.65	$30,808.42	$442,343
2	ALBANY	4.50	$312,179.00	$1,985.20	$314,164
2	BUFFALO	5.30	$299,543.00	$9,167.00	$308,710
2	CANANDAIGUA	9.00	$450,962.50	$45,666.00	$496,629
2	SYRACUSE	4.00	$204,684.06	$100.00	$204,784
3	BRONX~				
3	BROOKLYN	6.00	$337,003.13	$13,350.00	$350,353
3	EAST ORANGE	3.15	$230,259.00	$11,493.00	$241,752
3	MONTROSE*	6.50	$461,860.00	$17,449.00	$479,309
4	COATESVILLE	3.80	$211,430.00	$2,000.00	$213,430
4	PITTSBURGH	7.15	$413,177.00	$7,354.00	$420,531
5	PERRY POINT	6.50	$419,178.00	$16,535.96	$435,714
6	SALISBURY	5.63	$70,694.00	$37,245.00	$107,939
7	ATLANTA	5.20	$239,295.00	$14,150.00	$253,445
7	AUGUSTA	6.00	$319,176.92	$5,244.08	$324,421
7	TUSKEGEE	2.00	$294,156.94	$6,012.12	$300,169
8	GAINESVILLE*	6.50	$496,048.00	$39,465.00	$535,513
8	MIAMI	4.25	$323,322.60	$32,500.00	$355,823
9	MOUNTAIN HOME	2.30	$218,101.00	$3,439.00	$221,540
10	CHILLICOTHE	6.00	$346,084.06	$13,495.41	$359,579
10	CINCINNATI	4.00	$180,755.00	$12,700.00	$193,455
10	CLEVELAND	6.50	$588,672.00	$29,105.73	$617,778
10	COLUMBUS	3.00	$176,708.00	$10,873.24	$187,581
10	DAYTON	4.00	$223,399.45	$32,029.51	$255,429
11	ANN ARBOR	5.20	$288,263.73	$47,100.00	$335,364
11	BATTLE CREEK	6.00	$323,985.00	$15,342.00	$339,327
11	DETROIT	8.80	$299,467.00	$5,500.00	$304,967
12	CHICAGO-WEST SIDE	5.25	$254,280.86	$5,750.00	$260,031
12	MADISON	2.70	$221,552.00	$26,087.19	$247,639
12	NORTH CHICAGO*	9.00	$635,252.00	$24,138.00	$659,390
13	MINNEAPOLIS	5.20	$318,543.00	$12,789.63	$331,333
14	KNOXVILLE	7.70	$436,195.14	$14,785.85	$450,981
17	DALLAS	5.50	$338,117.00	$15,018.00	$353,135
17	WACO~				
19	DENVER	6.50	$327,593.00	$5,796.00	$333,389
19	SO. COLORADO	7.60	$256,395.50	$152,120.88	$408,516
20	AMERICAN LAKE	5.65	$324,252.00	$4,643.50	$328,896
20	BOISE*	5.00	$287,695.00	$3,000.00	$290,695
20	PORTLAND	6.10	$409,884.00	$21,970.00	$431,854
20	SEATTLE*	5.30	$298,397.15	$4,643.50	$303,041
20	SPOKANE	2.50	$143,364.00	$11,750.00	$155,114
21	SAN FRANCISCO	2.20	$265,228.86	$5,188.00	$270,417
22	WEST LA	5.00	$327,776.00	$24,228.00	$352,004
	ALL SITES	240.51	$14,472,783	$857,026	$15,329,809
	SITE AVERAGE	5.47	$328,927	$19,478	$348,405
	SITE STD. DEV.	1.93	$128,134	$23,751	$132,338

* Additional FTEE provided by Medical Center (Total: 10.6 FTEE)

Bedford 3.5 FTEE	Montrose 1.5 FTEE
Boise 1.4 FTEE	North Chicago 2.8 FTEE
Gainesville 1.3 FTEE	Seattle .1 FTEE

~ Did not submit FY00 Annual Progress Report

Source: MHICM Local Progress Reports FY 2000

TABLE 2-5. UTILIZATION OF STAFF RESOURCES

VISN	SITE	ALLOCATED FTE	FY 2000 FILLED FTE	% FTE UTILIZED	SEPT.'00 CLINICAL FTE^	FTE UNFILLED GTE 6 MO.	FTE ASSIGNED TO NON-MHICM
1	BEDFORD*	9.75	9.75	100.0%	9.75	N	N
1	BROCKTON	10.00	9.00	90.0%	6.50	Y	Y
1	TOGUS	3.50	3.25	92.9%	2.50	N	N
1	WEST HAVEN	10.40	6.03	58.0%	5.50	Y	N
2	ALBANY	11.00	4.50	40.9%	3.00	Y	N
2	BUFFALO	8.50	5.30	62.4%	4.00	Y	Y
2	CANANDAIGUA	11.00	9.00	81.8%	8.50	N	N
2	SYRACUSE	4.25	4.00	94.1%	3.50	Y	Y
3	BRONX~	5.50	3.50	63.6%	2.50		
3	BROOKLYN	6.20	6.00	96.8%	5.50	N	Y
3	EAST ORANGE	5.20	3.15	60.6%	2.50	Y	Y
3	MONTROSE*	6.50	6.50	100.0%	5.50	N	N
4	COATESVILLE	6.20	3.80	61.3%	3.80	N	N
4	PITTSBURGH	7.15	7.15	100.0%	5.50	N	Y
5	PERRY POINT	6.50	6.50	100.0%	5.50	N	Y
6	SALISBURY	6.50	5.63	86.6%	4.63	Y	Y
7	ATLANTA	5.20	5.20	100.0%	3.50	N	N
7	AUGUSTA	6.20	6.00	96.8%	4.50	Y	N
7	TUSKEGEE	3.50	2.00	57.1%	2.00	N	N
8	GAINESVILLE*	6.50	6.50	100.0%	4.00	N	N
8	MIAMI	7.25	4.25	58.6%	2.50	Y	N
9	MOUNTAIN HOME	3.50	2.30	65.7%	1.50	N	N
10	CHILLICOTHE	6.20	6.00	96.8%	5.50	Y	N
10	CINCINNATI	4.00	4.00	100.0%	4.00	N	Y
10	CLEVELAND	6.50	6.50	100.0%	4.00	N	N
10	COLUMBUS	4.00	3.00	75.0%	2.50	N	N
10	DAYTON	4.00	4.00	100.0%	3.00	Y	N
11	ANN ARBOR	5.20	5.20	100.0%	3.50	N	N
11	BATTLE CREEK	6.20	6.00	96.8%	5.50	Y	N
11	DETROIT	9.30	8.80	94.6%	7.80	N	N
12	CHICAGO-WEST SIDE	7.25	5.25	72.4%	3.50	Y	N
12	MADISON	3.50	2.70	77.1%	2.00	N	Y
12	NORTH CHICAGO*	9.00	9.00	100.0%	8.00	Y	N
13	MINNEAPOLIS	5.20	5.20	100.0%	3.50	N	N
14	KNOXVILLE	8.70	7.70	88.5%	5.75	Y	N
17	DALLAS	6.50	5.50	84.6%	5.00	N	Y
17	WACO~	5.00	3.00	60.0%	2.50		
19	DENVER	7.20	6.50	90.3%	5.50	N	N
19	SOUTHERN COLORADO	7.60	7.60	100.0%	7.50	N	N
20	AMERICAN LAKE	6.50	5.65	86.9%	4.50	Y	N
20	BOISE*	5.00	5.00	100.0%	2.50	N	N
20	PORTLAND	6.60	6.10	92.4%	5.50	Y	N
20	SEATTLE*	5.30	5.30	100.0%	3.60	N	N
20	SPOKANE	3.25	2.50	76.9%	1.75	N	N
21	SAN FRANCISCO	6.20	2.20	35.5%	1.50	Y	N
22	WEST LA	6.50	5.00	76.9%	3.50	Y	N
	ALL SITES	295.00	247.01	83.7%	198.58	43.2%	25.0%
	SITE AVERAGE	6.41	5.37	84.2%	4.32		
	SITE STD. DEV.	2.05	1.97	17.7%	1.93		

* Additional FTEE provided by Medical Center (Total: 10.6 FTEE)

Bedford 3.5 FTEE	Montrose 1.5 FTEE
Boise 1.4 FTEE	North Chicago 2.8 FTEE
Gainesville 1.3 FTEE	Seattle .1 FTEE

~ Did not submit FY00 Annual Progress Report

^Outlined values deviate from minimum staffing standard (4.0 Clinical FTE) or expected staffing.

Source: September 2000 FTE/Caseload Report

TABLE 2-6. CLINICAL STAFF AND CASELOAD

VISN	SITE	*MEDICAL SUPPORT MD	*MEDICAL SUPPORT RN	CLINICAL FTE	9/00 TOTAL # VETS	9/00 CASELOAD per CLIN FTE^	TEAM TARGET CASELOAD MIN	TEAM TARGET CASELOAD MAX
1	BEDFORD	Y	Y	10.50	117	11.14	74	158
1	BROCKTON	Y	N	6.50	69	10.62	46	98
1	TOGUS	Y	Y	2.50	28	11.20	18	38
1	WEST HAVEN	Y	Y	5.50	62	11.27	39	83
2	ALBANY	Y	Y	3.00	38	12.67	21	45
2	BUFFALO	Y	Y	4.00	60	15.00	28	60
2	CANANDAIGUA	Y	Y	8.50	112	13.18	60	128
2	SYRACUSE	Y	Y	3.50	49	14.00	25	53
3	BRONX~			2.50	51	20.40	18	38
3	BROOKLYN	N	Y	5.50	66	12.00	39	83
3	EAST ORANGE	Y	Y	2.50	33	13.20	18	38
3	MONTROSE	Y	Y	5.50	105	19.09	39	83
4	COATESVILLE	N	Y	3.80	68	17.89	27	57
4	PITTSBURGH	Y	Y	5.50	99	18.00	39	83
5	PERRY POINT	Y	Y	5.50	95	17.27	39	83
6	SALISBURY	Y	Y	4.63	37	7.99	32	69
7	ATLANTA	Y	Y	3.50	51	14.57	25	53
7	AUGUSTA	N	Y	4.50	69	15.33	32	68
7	TUSKEGEE	N	Y	2.00	64	32.00	14	30
8	GAINESVILLE	Y	Y	4.00	65	16.25	28	60
8	MIAMI	Y	Y	2.50	48	19.20	18	38
9	MOUNTAIN HOME	Y	Y	1.50	6	4.00	11	23
10	CHILLICOTHE	Y	Y	5.50	61	11.09	39	83
10	CINCINNATI	N	Y	4.00	43	10.75	28	60
10	CLEVELAND	Y	Y	4.00	45	11.25	28	60
10	COLUMBUS	Y	Y	2.50	22	8.80	18	38
10	DAYTON	Y	Y	3.00	33	11.00	21	45
11	ANN ARBOR	Y	Y	3.50	42	12.00	25	53
11	BATTLE CREEK	Y	Y	5.50	58	10.55	39	83
11	DETROIT	Y	Y	7.80	72	9.23	55	117
12	CHICAGO-WEST SIDE	Y	Y	3.50	58	16.57	25	53
12	MADISON	Y	Y	2.00	37	18.50	14	30
12	NORTH CHICAGO	Y	Y	8.00	135	16.88	56	120
13	MINNEAPOLIS	Y	Y	3.50	60	17.14	25	53
14	KNOXVILLE	Y	Y	5.75	53	9.22	40	86
17	DALLAS	Y	Y	5.00	67	13.40	35	75
17	WACO~			2.50	43	17.20	18	38
19	DENVER	Y	Y	5.50	65	11.82	39	83
19	SOUTHERN COLORADO	Y	Y	7.50	110	14.67	53	113
20	AMERICAN LAKE	Y	Y	4.50	48	10.67	32	68
20	BOISE	Y	N	2.50	30	12.00	18	38
20	PORTLAND	Y	Y	5.50	58	10.55	39	83
20	SEATTLE	Y	Y	3.60	34	9.44	25	54
20	SPOKANE	Y	Y	1.75	11	6.29	12	26
21	SAN FRANCISCO	Y	Y	1.50	33	22.00	11	23
22	WEST LA	Y	Y	3.50	45	12.86	25	53
	ALL SITES	88.6%	95.5%	199.33	2655	13.32	1395	2990
	SITE AVERAGE			4.33	58	13.69	30	65
	SITE STD. DEV.			1.98	28	4.66	14	30

* Medical Support assigned to team: N=No, Y=Yes

Target Caseload ranges based on client:clinical FTE levels of 7:1 Minimum and 15:1 Maximum

^Outlined values fall outside minimum standard caseload range (7.0-15.0 clients per clinical FTE) or deviate from expected staffing.

Akron, Grand Junction, Salt Lake City, and Sheridan are excluded from FY00 Report

~ Did not submit September 2000 FTE/Caseload Report

TABLE 2-7. DEMOGRAPHIC CHARACTERISTICS OF VETERANS AT INTAKE

	OVERALL (N=3120)	GM&S (N=1725)	NP (N=1395)
	#	#	#
AGE (Mean Years)	49.4	48.8	50.2
	%	%	%
GENDER			
Male	91.6	90.8	92.5
Female	8.4	9.2	7.5
RACE			
White, non-Hisp.	67.4	62.8	73.4
African-American	26.9	29.4	23.8
Hispanic	2.8	4.1	1.3
Other	0.9	1.1	0.6
Alaskan /American Indian	0.6	1.0	0.2
Asian or Pacific Islander	1.3	1.6	0.8
MARITAL STATUS			
Never Married	49.7	46.2	54.1
Divorced	29.1	30.1	27.8
Married	10.3	11.8	8.4
Separated	6.3	6.6	5.9
Widowed	3.8	4.1	3.4
Living w/signif. other	0.9	1.3	0.4
COMBAT EXPOSURE	20.6	21.4	19.5
EMPLOYMENT LAST 3 YRS			
Disability	67.1	69.7	63.7
Hosp./Controlled Environment	7.3	2.9	12.8
Retired	5.9	6.0	5.8
Unemployed	5.6	5.7	5.5
Part-time/Irregular work	6.1	6.2	5.9
Full-time work	4.9	5.8	3.9
Part-time Regular work	2.2	2.7	1.6
Student/Volunteer work	0.9	0.9	0.8

Source: Client Interviews

TABLE 2-8. ENTRY CRITERIA INFORMATION

	OVERALL (N=3120)	GM&S (N=1725)	NP (N=1395)
	#	#	#
MEAN HOSPITAL DAYS (1 Yr Pre)	103.8	66.1	150.9
	%	%	%
INP'T. PSYCH. UNIT REFERRAL	51.8	52.4	51.2
PRIM. PSYCHIATRIC DIAGNOSIS	100.0	100.0	100.0
GTE 30 DAYS IN HOSPITAL	81.6	77.6	86.7
DUAL DIAGNOSIS AT ENTRY	20.9	19.9	22.2
DIAGNOSIS			
Schizophrenia	59.5	60.3	58.4
Schizoaffective	18.3	18.4	18.1
Bipolar Disorder	15.7	16.0	15.4
Affective Disorder	6.7	7.3	5.9
PTSD	4.8	5.5	3.9
Psychosis/Other	4.0	4.9	3.0
Other Disorder	9.0	10.5	7.3
Anxiety Disorder	2.6	2.8	2.4
Alcohol Abuse/Dependence	16.9	16.6	17.2
Organic Brain Syndrome	1.6	1.6	1.7
Dementia	1.7	1.7	1.7
Borderline Personality Disorder	2.8	3.1	2.5
Drug Abuse/Dependence	9.9	10.3	9.4
Adjustment Disorder	0.7	0.9	0.4
DISABILITY/PENSION	92.9	93.4	92.2
SC DISABILITY	57.7	62.0	52.3
NSC PENSION	17.2	16.0	18.7
SSI	14.7	15.2	14.2
SSDI	48.6	50.0	47.1
PAYEE	48.6	44.0	54.5

Source: Client Interviews

TABLE 2-9. RECEIPT OF DISABILITY COMPENSATION OR PENSION INCOME

VISN	SITE	VA COMPENSATION %	NSC PENSION %	SSI %	SSDI %	REP PAYEE %	ANY DISABILITY %
1	BEDFORD	40.0	12.7	19.5	37.8	28.8	80.0
1	BROCKTON	50.0	16.7	13.3	46.7	73.3	93.3
1	TOGUS	63.3	10.7	16.7	46.7	63.3	100.0
1	WEST HAVEN	53.3	16.7	23.3	53.3	46.7	96.7
2	ALBANY	83.3	0.0	0.0	33.3	33.3	83.3
2	BUFFALO	56.3	15.2	21.7	31.9	50.0	91.7
2	CANANDAIGUA	55.9	25.4	10.2	37.3	64.4	98.3
2	SYRACUSE	34.1	16.2	17.1	31.7	24.4	85.4
3	BRONX	72.7	18.2	27.3	27.3	18.2	100.0
3	BROOKLYN	57.0	11.4	11.5	39.2	15.2	92.4
3	EAST ORANGE	51.4	25.7	10.8	40.5	29.7	97.3
3	MONTROSE	61.3	12.3	12.0	55.4	82.7	97.3
4	COATESVILLE	69.2	11.8	23.1	40.3	59.7	97.4
4	PITTSBURGH	53.8	27.2	9.7	44.7	25.0	87.5
5	PERRY POINT	60.6	22.1	5.8	46.2	70.9	97.1
6	SALISBURY	61.0	30.0	9.8	43.9	58.5	97.6
7	ATLANTA	85.5	2.1	11.3	61.8	40.0	96.4
7	AUGUSTA	64.0	24.0	13.3	40.0	69.3	100.0
7	TUSKEGEE	55.1	18.0	25.4	61.8	57.4	97.1
8	GAINESVILLE	62.5	11.1	14.3	59.4	50.8	100.0
8	MIAMI	63.5	15.4	0.0	0.0	46.0	78.8
9	MOUNTAIN HOME	50.0	12.5	12.5	75.0	12.5	87.5
10	CHILLICOTHE	40.3	16.4	14.8	42.6	50.0	83.9
10	CINCINNATI	61.1	5.6	13.0	56.6	34.0	88.9
10	CLEVELAND	58.5	11.5	19.0	57.8	59.4	95.4
10	COLUMBUS	56.5	18.2	17.4	69.6	43.5	87.0
10	DAYTON	59.0	30.8	12.8	41.0	25.6	94.9
11	ANN ARBOR	55.1	8.5	10.4	55.1	51.0	89.8
11	BATTLE CREEK	60.6	15.9	17.4	63.4	62.0	97.2
11	DETROIT	71.2	16.4	17.8	56.9	47.9	97.3
12	CHICAGO-WEST SIDE	53.8	14.5	13.3	42.6	28.6	91.0
12	MADISON	56.4	12.8	7.9	66.7	48.7	92.3
12	NORTH CHICAGO	35.5	17.9	20.0	47.9	61.4	90.1
13	MINNEAPOLIS	56.3	17.2	17.5	60.3	45.3	98.4
14	KNOXVILLE	44.8	15.5	0.0	70.7	48.3	89.7
17	DALLAS	62.3	21.7	10.3	48.5	55.1	95.7
17	WACO	39.1	22.2	13.3	24.4	41.3	91.3
19	DENVER	73.9	14.5	22.4	44.9	52.2	97.1
19	SOUTHERN COLORADO	77.8	17.2	6.1	58.6	66.7	98.0
20	AMERICAN LAKE	58.8	13.7	9.8	52.9	35.3	88.2
20	BOISE	80.0	48.6	25.7	48.6	45.7	100.0
20	PORTLAND	60.3	20.9	6.5	43.3	38.2	83.8
20	SEATTLE	56.1	18.4	12.2	35.0	34.1	95.1
20	SPOKANE	86.7	6.7	20.0	26.7	20.0	100.0
21	SAN FRANCISCO	43.2	28.6	22.2	35.1	37.8	91.9
22	WEST LA	58.5	14.9	22.4	38.0	45.1	81.1
	ALL SITES	57.7	17.2	14.7	48.6	48.6	92.9
	SITE AVERAGE	58.9	17.0	14.4	46.6	45.6	92.9
	SITE STD. DEV.	12.2	8.1	6.7	14.1	16.4	5.9

Source: Client Interviews

TABLE 2-10. ENTRY CRITERIA INFORMATION BY SITE

VISN	SITE	LIFETIME HOSP GT 2 YRS %	YEARS. SINCE 1ST HOSP. #	GTE 30 DAYS HOSP. YR PRE^ %	PSYCHOTIC DX AT ENTRY %	DUAL DIAGNOSIS %
1	BEDFORD	37.4	16.8	64.1	40.8	69.2
1	BROCKTON	83.3	24.3	**100.0**	83.3	6.7
1	TOGUS	60.7	26.2	90.0	70.0	16.7
1	WEST HAVEN	60.0	24.9	93.3	73.3	33.3
2	ALBANY	16.7	9.8	50.0	83.3	33.3
2	BUFFALO	24.4	31.6	28.3	68.8	14.6
2	CANANDAIGUA	84.5	26.0	78.0	83.1	30.5
2	SYRACUSE	13.2	14.5	92.7	48.8	24.4
3	BRONX	54.5	21.4	63.6	81.8	27.3
3	BROOKLYN	43.2	20.9	83.5	77.2	25.3
3	EAST ORANGE	43.2	21.4	83.3	86.5	18.9
3	MONTROSE	90.6	29.3	97.3	**96.0**	16.0
4	COATESVILLE	74.0	24.7	87.0	83.3	24.4
4	PITTSBURGH	50.0	23.4	91.3	84.6	11.5
5	PERRY POINT	85.9	31.4	**100.0**	**93.3**	10.6
6	SALISBURY	90.2	25.2	95.1	87.8	34.1
7	ATLANTA	44.9	22.9	94.4	78.2	5.5
7	AUGUSTA	90.0	24.4	98.7	**92.0**	4.0
7	TUSKEGEE	33.3	18.7	72.7	**92.8**	5.8
8	GAINESVILLE	50.8	24.5	81.3	82.8	4.7
8	MIAMI	48.8	23.4	97.5	75.0	9.6
9	MOUNTAIN HOME	28.6	22.5	87.5	75.0	
10	CHILLICOTHE	52.5	19.9	95.2	82.3	14.5
10	CINCINNATI	31.5	20.4	51.9	74.1	18.5
10	CLEVELAND	75.9	24.6	98.5	**90.8**	21.5
10	COLUMBUS	22.7	19.0	73.9	69.6	26.1
10	DAYTON	21.1	17.3	71.8	56.4	5.1
11	ANN ARBOR	34.9	18.0	83.3	79.6	26.5
11	BATTLE CREEK	84.4	24.2	84.3	88.7	8.5
11	DETROIT	61.7	23.0	93.2	**90.4**	26.0
12	CHICAGO-WEST SIDE	40.0	21.8	92.9	66.7	19.2
12	MADISON	42.1	24.5	89.5	82.1	25.6
12	NORTH CHICAGO	58.3	22.8	75.9	46.8	24.1
13	MINNEAPOLIS	56.7	20.6	**100.0**	79.7	4.7
14	KNOXVILLE	54.0	22.9	91.4	75.9	25.9
17	DALLAS	34.9	16.9	95.7	88.4	34.8
17	WACO	63.0	20.3	91.3	76.1	17.4
19	DENVER	34.4	17.7	94.2	79.7	29.0
19	SOUTHERN COLORADO	62.1	28.4	11.1	83.8	13.1
20	AMERICAN LAKE	43.8	18.5	96.1	**92.2**	25.5
20	BOISE	31.3	20.9	37.1	77.1	17.1
20	PORTLAND	38.8	19.7	95.1	76.5	14.7
20	SEATTLE	33.3	21.8	80.0	70.7	34.1
20	SPOKANE	13.3	20.5	40.0	80.0	13.3
21	SAN FRANCISCO	36.1	24.3	88.9	81.1	27.0
22	WEST LA	62.7	20.3	98.1	66.0	20.8
	ALL SITES	57.7	22.5	81.6	77.7	20.9
	SITE AVERAGE	50.0	22.1	81.7	78.1	20.4
	SITE STD. DEV.	21.7	4.1	20.6	12.0	11.8

^Outlined values do not meet the minimum standard (50% with 30+ hospital days in year prior to entry).

Source: Client Interviews

TABLE 2-11. CLINICAL STATUS AT ENTRY

VISN	SITE	INPATIENT AT ENTRY #	LOW IADL %	BPRS MEAN #	GAF MEAN #
1	BEDFORD	35.6	43.7	35.5	43.2
1	BROCKTON	16.7	70.4	42.0	31.5
1	TOGUS	76.7	40.0	32.1	48.8
1	WEST HAVEN	83.3	57.1	42.2	31.7
2	ALBANY	50.0	33.3	58.2	35.7
2	BUFFALO	6.3	77.5	32.5	37.3
2	CANANDAIGUA	10.2	46.4	38.4	35.9
2	SYRACUSE	34.1	51.2	44.5	39.9
3	BRONX	9.1	36.4	41.3	45.8
3	BROOKLYN	67.1	46.8	41.5	38.2
3	EAST ORANGE	89.2	62.2	33.3	39.1
3	MONTROSE	56.0	84.5	46.3	41.8
4	COATESVILLE	47.4	73.1	42.1	38.9
4	PITTSBURGH	81.7	55.4	38.1	35.8
5	PERRY POINT	54.4	69.5	46.5	42.6
6	SALISBURY	70.7	61.5	36.2	40.7
7	ATLANTA	78.2	55.8	34.3	46.4
7	AUGUSTA	65.3	47.8	31.1	44.6
7	TUSKEGEE	79.7	69.6	36.6	50.3
8	GAINESVILLE	46.9	60.3	48.8	44.4
8	MIAMI	0.0	55.8	35.6	42.8
9	MOUNTAIN HOME	37.5	50.0	37.8	59.6
10	CHILLICOTHE	90.3	45.2	33.7	40.3
10	CINCINNATI	51.9	59.3	28.7	43.4
10	CLEVELAND	68.8	44.8	42.9	31.6
10	COLUMBUS	26.1	60.9	44.0	43.5
10	DAYTON	23.1	35.9	28.8	55.2
11	ANN ARBOR	40.8	56.5	41.2	36.8
11	BATTLE CREEK	32.4	69.1	38.3	50.2
11	DETROIT	67.1	62.3	34.9	44.4
12	CHICAGO-WEST SIDE	30.6	60.5	30.4	39.9
12	MADISON	78.9	38.5	38.2	46.0
12	NORTH CHICAGO	53.6	42.2	35.4	35.1
13	MINNEAPOLIS	84.1	36.7	41.7	38.7
14	KNOXVILLE	13.8	64.3	43.3	33.6
17	DALLAS	88.4	52.2	40.0	43.4
17	WACO	50.0	45.7	40.0	46.8
19	DENVER	79.7	55.9	34.3	39.8
19	SOUTHERN COLORADO	2.0	43.0	33.5	42.4
20	AMERICAN LAKE	25.5	48.0	47.0	40.4
20	BOISE	5.7	42.9	37.1	43.4
20	PORTLAND	71.0	65.7	39.5	32.9
20	SEATTLE	29.3	53.7	55.4	39.7
20	SPOKANE	40.0	26.7	46.5	42.4
21	SAN FRANCISCO	45.9	57.1	40.9	36.5
22	WEST LA	78.8	55.8	44.1	46.9
	ALL SITES	51.8	54.7	39.2	40.8
	SITE AVERAGE	49.4	53.7	39.5	41.5
	SITE STD. DEV.	27.1	12.4	6.3	5.9

Outlined values exceed one standard deviation from the mean in undesired direction.

Source: Client Interviews

TABLE 2-12. MHICM PROGRAM TENURE

VISN	SITE	TOTAL VETS FY00	VETS DISCHARGED #	VETS DISCHARGED^ %	MEAN DAYS IN PROGRAM PER VET
1	BEDFORD	131	19	14.5%	899
1	BROCKTON	81	15	18.5%	1040
1	TOGUS	30	2	6.7%	1132
1	WEST HAVEN	71	7	9.9%	690
2	ALBANY	44	5	11.4%	1711
2	BUFFALO	80	18	22.5%	583
2	CANANDAIGUA	129	16	12.4%	880
2	SYRACUSE	66	11	16.7%	587
3	BRONX	56	5	8.9%	1450
3	BROOKLYN	82	15	18.3%	982
3	EAST ORANGE	37	4	10.8%	1030
3	MONTROSE	129	21	16.3%	836
4	COATESVILLE	78	10	12.8%	1185
4	PITTSBURGH	107	9	8.4%	969
5	PERRY POINT	108	11	10.2%	1022
6	SALISBURY	44	4	9.1%	1428
7	ATLANTA	56	6	10.7%	1096
7	AUGUSTA	75	6	8.0%	1147
7	TUSKEGEE	74	10	13.5%	905
8	GAINESVILLE	66	1	**1.5%**	1257
8	MIAMI	53	6	11.3%	1565
9	MOUNTAIN HOME	8	2	25.0%	1529
10	CHILLICOTHE	62	1	**1.6%**	1022
10	CINCINNATI	55	12	21.8%	278
10	CLEVELAND	68	23	33.8%	1065
10	COLUMBUS	23	1	**4.3%**	311
10	DAYTON	39	5	12.8%	323
11	ANN ARBOR	50	8	16.0%	956
11	BATTLE CREEK	72	13	18.1%	1276
11	DETROIT	74	2	**2.7%**	541
12	CHICAGO-WEST SIDE	80	21	26.3%	1153
12	MADISON	39	2	**5.1%**	1166
12	NORTH CHICAGO	144	9	6.3%	794
13	MINNEAPOLIS	66	6	9.1%	1068
14	KNOXVILLE	63	10	15.9%	179
17	DALLAS	70	3	**4.3%**	1243
17	WACO				
19	DENVER	71	6	8.5%	1051
19	SOUTHERN COLORADO	111	0	**0.0%**	175
20	AMERICAN LAKE	52	3	5.8%	1150
20	BOISE	35	4	11.4%	1301
20	PORTLAND	68	9	13.2%	1502
20	SEATTLE	42	7	16.7%	1255
20	SPOKANE	15	4	26.7%	1358
21	SAN FRANCISCO	39	9	23.1%	996
22	WEST LA	53	7	13.2%	1088
	ALL SITES	2996	368	12.2%	995
	SITE AVERAGE	66.6	8	12.8%	1004
	SITE STD. DEV.	30.5	6	7.4%	368
	SITE MEDIAN				1051

^Outlined values exceed the threshold level (20%) for the minimum program standard.

Source: Clinical Progress Reports as of 9/30/00

TABLE 2-13. PATTERN OF SERVICE DELIVERY

VISN	SITE	FOLLOW-UP VETS #	CONTACT FREQUENCY % WEEKLY OR MORE FACE-FACE	CONTACT FREQUENCY % WEEKLY OR MORE TELEPHONE	INTENSITY GTE 1 HOUR PER WEEK CONTACT~	LOCATION 60% OR MORE CONTACT IN COMMUNITY^
1	BEDFORD	131	93.9	71.0	74.8	74.0
1	BROCKTON	81	98.8	66.7	**85.2**	93.8
1	TOGUS	30	90.0	53.3	40.0	63.3
1	WEST HAVEN	71	93.0	80.3	**85.9**	93.0
2	ALBANY	44	88.6	84.1	**90.9**	81.8
2	BUFFALO	80	83.8	57.5	65.0	90.0
2	CANANDAIGUA	129	91.5	57.4	**92.2**	79.1
2	SYRACUSE	66	78.8	69.7	78.8	84.8
3	BRONX	56				
3	BROOKLYN	82	67.1	73.2	65.9	74.4
3	EAST ORANGE	37	81.1	64.9	**83.8**	94.6
3	MONTROSE	129	95.3	54.3	55.8	96.1
4	COATESVILLE	78	67.9	51.3	60.3	76.9
4	PITTSBURGH	107	88.8	53.3	34.6	83.2
5	PERRY POINT	108	92.6	68.5	**82.4**	84.3
6	SALISBURY	44	54.5	47.7	47.7	**97.7**
7	ATLANTA	56	71.4	50.0	42.9	76.8
7	AUGUSTA	75	84.0	41.3	77.3	86.7
7	TUSKEGEE	74	86.5	39.2	**81.1**	89.2
8	GAINESVILLE	66	90.9	74.2	78.8	**100.0**
8	MIAMI	53	98.1	75.5	67.9	**98.1**
9	MOUNTAIN HOME	8	75.0	50.0	**87.5**	62.5
10	CHILLICOTHE	62	77.4	48.4	40.3	85.5
10	CINCINNATI	55	70.9	80.0	60.0	89.1
10	CLEVELAND	68	79.4	51.5	63.2	86.8
10	COLUMBUS	23	91.3	60.9	56.5	82.6
10	DAYTON	39	71.8	61.5	61.5	87.2
11	ANN ARBOR	50	70.0	64.0	62.0	**98.0**
11	BATTLE CREEK	72	61.1	38.9	56.9	90.3
11	DETROIT	74	77.0	56.8	59.5	94.6
12	CHICAGO-WEST SIDE	80	73.8	48.8	42.5	80.0
12	MADISON	39	89.7	53.8	69.2	**100.0**
12	NORTH CHICAGO	144	84.0	38.9	56.9	84.0
13	MINNEAPOLIS	66	92.4	43.9	71.2	**100.0**
14	KNOXVILLE	63	87.3	46.0	52.4	90.5
17	DALLAS	70	88.6	41.4	50.0	91.4
17	WACO	46				
19	DENVER	71	88.7	29.6	47.9	90.1
19	SOUTHERN COLORADO	111	100.0	97.3	**97.3**	**100.0**
20	AMERICAN LAKE	52	90.4	65.4	65.4	92.3
20	BOISE	35	68.6	62.9	71.4	80.0
20	PORTLAND	68	83.8	45.6	51.5	91.2
20	SEATTLE	42	81.0	61.9	61.9	81.0
20	SPOKANE	15	80.0	26.7	53.3	40.0
21	SAN FRANCISCO	39	82.1	23.1	25.6	76.9
22	WEST LA	53	67.9	56.6	54.7	66.0
	ALL SITES	3042	84.7	59.4	66.7	87.2
	SITE AVERAGE	66.1	82.5	56.5	63.9	85.4
	SITE STD. DEV.	30.3	10.6	15.5	16.6	11.9

~Outlined values do not meet the minimum standard of 50% or more contact in community
Bold/Underlined values represent positive outliers.

Source: Clinical Progress Reports as of 9/30/00

TABLE 2-14. OUTPATIENT CLINIC VISITS

VISN	SITE	TOTAL VETS SEEN	MEAN CONTACTS per VET:12 MONTHS TOTAL	TELEPHONE	FACE-FACE	FY 2000 MEAN AMOUNT OF TIME IN PGM	ADJUSTED FACE-FACE CONTACTS/ VETERAN	ADJUSTED FACE-FACE CONTACTS/WK/ VETERAN^
1	BEDFORD	127	132.11	17.04	115.07	0.83	138.85	**2.67**
1	BROCKTON	79	161.65	13.76	147.89	0.98	150.30	**2.89**
1	TOGUS	29	62.10	15.52	46.59	0.99	47.22	0.91
1	WEST HAVEN	65	96.65	23.17	73.48	0.96	76.29	1.47
2	ALBANY	22	1.91	0.00	1.91	0.96	1.98	0.04
2	BUFFALO	76	35.72	4.08	31.64	0.88	35.96	0.69
2	CANANDAIGUA	124	70.31	0.01	70.31	0.98	71.95	1.38
2	SYRACUSE	62	48.26	9.02	39.24	0.90	43.72	0.84
3	BRONX	45	12.24	0.00	12.24	1.00	12.24	0.24
3	BROOKLYN	82	35.88	17.34	18.54	0.85	21.93	0.42
3	EAST ORANGE	34	67.71	7.00	60.71	0.91	66.81	1.28
3	MONTROSE	120	38.40	0.72	37.68	0.93	40.73	0.78
4	COATESVILLE	72	47.86	4.67	39.49	0.94	41.85	0.80
4	PITTSBURGH	102	57.25	3.74	53.51	0.91	58.84	1.13
5	PERRY POINT	101	54.82	5.63	49.19	0.92	53.46	1.03
6	SALISBURY	23	7.35	0.13	5.09	0.82	6.24	0.12
7	ATLANTA	52	123.87	32.88	90.98	0.93	97.56	1.88
7	AUGUSTA	70	186.67	14.80	171.87	0.95	180.55	**3.47**
7	TUSKEGEE	69	33.72	0.23	33.49	0.88	38.05	0.73
8	GAINESVILLE	63	41.87	0.48	41.40	0.94	44.15	0.85
8	MIAMI	51	92.43	11.67	80.76	0.98	82.13	1.58
9	MOUNTAIN HOME	8	71.38	3.38	68.00	1.00	68.00	1.31
10	AKRON	17	39.76	0.00	39.76	0.83	48.09	0.92
10	CHILLICOTHE	61	110.66	24.87	84.67	0.97	87.56	1.68
10	CINCINNATI	54	47.39	8.70	38.69	0.81	48.00	0.92
10	CLEVELAND	64	41.05	0.02	41.03	0.87	47.31	0.91
10	COLUMBUS	21	62.62	0.00	62.62	0.88	71.15	1.37
10	DAYTON	38	25.45	0.00	25.45	0.85	29.80	0.57
11	ANN ARBOR	50	91.72	12.20	79.52	0.94	84.24	1.62
11	BATTLE CREEK	70	60.29	0.00	60.29	0.94	64.01	1.23
11	DETROIT	74	55.53	0.00	55.53	0.90	61.62	1.18
12	CHICAGO-WEST SIDE	76	55.20	1.47	53.72	0.84	64.01	1.23
12	MADISON	38	267.05	36.00	231.05	0.99	233.78	**4.50**
12	NORTH CHICAGO	140	153.85	0.71	153.14	0.93	165.42	**3.18**
13	MINNEAPOLIS	65	60.58	0.49	60.09	0.96	62.74	1.21
14	KNOXVILLE	56	40.05	0.00	39.11	0.58	67.49	1.30
17	DALLAS	67	61.03	3.87	57.16	0.97	59.11	1.14
17	WACO	43	44.60	0.00	44.60	1.00	44.60	0.86
19	DENVER	67	40.67	0.00	40.60	0.85	47.75	0.92
19	SOUTHERN COLORADO	103	21.52	0.54	12.79	0.28	44.93	0.86
20	AMERICAN LAKE	50	76.32	12.18	64.14	0.89	71.75	1.38
20	BOISE	32	86.69	1.69	85.00	0.92	92.71	1.78
20	PORTLAND	64	74.98	4.84	70.14	0.96	73.37	1.41
20	SEATTLE	41	111.27	2.59	108.68	0.93	117.12	**2.25**
20	SPOKANE*	13	83.31	43.69	39.62	0.91	43.65	0.84
21	SAN FRANCISCO	37	47.30	0.78	46.51	0.91	50.89	0.98
22	WEST LA	46	24.85	0.00	24.85	0.99	25.16	0.48
	ALL SITES	2863	72.24	6.34	65.44	0.87	75.33	1.45
	SITE AVERAGE	60.91	69.44	7.23	61.87	0.90	67.77	1.30
	SITE STD. DEV.	30.07	48.65	10.33	43.38	0.12	44.25	0.85

^Outlined values do not meet the minimum standard of at least 1 face-to-face contact per client per week.
Bold/Underlined values exceed one standard deviation from the mean in desired direction.

Source: Outpatient clinic visits entered under DSS Identifiers 546 and 552 between 10/01/99 and 9/30/00.
* Corrected outpatient clinic visit totals provided by facility.

TABLE 2-15. THERAPEUTIC SERVICES

VISN	SITE	FOLLOW-UP VETS #	SUPPORTIVE CONTACT %	ACTIVE MONITOR %	REHABILI-TATION^ %	PSYCHOTHER. RELATIONSHIP %	SOCIAL/REC. ACTIVITIES %	CRISIS INTERVENT %	MEDICATN MGMT %	MEDICAL SCREEN %	SEEN FOR SUB. ABUSE %	HOUSING SUPPORT %	VOCATION SUPPORT %
1	BEDFORD	131	100.0	90.9	38.2	100.0	63.6	72.7	81.8	45.5	72.7	63.6	45.5
1	BROCKTON	81	100.0	100.0	48.6	75.0	75.0	25.0	100.0	25.0	50.0	75.0	50.0
1	TOGUS	30	66.7	66.7	4.2	66.7	66.7	66.7	66.7	66.7		33.3	
1	WEST HAVEN	71	100.0	100.0	50.0	85.7	42.9	100.0	85.7	28.6	42.9	57.1	14.3
2	ALBANY	44			25.0								
2	BUFFALO	80	91.7	83.3		25.0		25.0	58.3	16.7	8.3	41.7	
2	CANANDAIGUA	129	100.0	100.0	**67.1**	85.7	100.0	42.9	42.9	85.7	57.1	57.1	57.1
2	SYRACUSE	66	100.0	100.0	29.6	83.3	66.7	50.0	33.3	50.0	33.3	50.0	50.0
3	BRONX	56			12.5								
3	BROOKLYN	82	80.0	80.0	15.9	80.0	20.0	60.0	60.0		20.0	40.0	20.0
3	EAST ORANGE	37	83.3	66.7	33.3	83.3	83.3	83.3	83.3	83.3	33.3	50.0	33.3
3	MONTROSE	129	100.0	100.0	31.3	37.5	81.3	68.8	100.0	100.0	6.3	25.0	
4	COATESVILLE	78	100.0	100.0	**71.9**	66.7	50.0	83.3	100.0	100.0	50.0	83.3	33.3
4	PITTSBURGH	107	95.7	100.0	29.3	87.0	13.0	69.6	65.2	43.5	13.0	34.8	4.3
5	PERRY POINT	108	100.0	100.0	**85.1**	90.9	81.8	90.9	100.0	90.9	54.5	90.9	63.6
6	SALISBURY	44			4.3								
7	ATLANTA	56	100.0	60.0	19.5	50.0	20.0	60.0	80.0	60.0	25.0	20.0	20.0
7	AUGUSTA	75	100.0	100.0	**74.5**	100.0	100.0	100.0	100.0	71.4	28.6	71.4	28.6
7	TUSKEGEE	74	90.9	90.9	17.3	54.5	72.7	72.7	81.8	45.5	36.4	27.3	9.1
8	GAINESVILLE	66	100.0	100.0	35.2	100.0	100.0	75.0	100.0	25.0		75.0	
8	MIAMI	53			54.8								
9	MOUNTAIN HOME	8			50.0								
10	CHILLICOTHE	62	100.0	90.0	11.5	40.0	80.0	50.0	100.0	60.0	20.0	80.0	40.0
10	CINCINNATI	55	95.5	91.3	**71.4**	73.9	60.9	73.9	82.6	91.3	34.8	43.5	17.4
10	CLEVELAND	68	100.0	100.0	11.6	71.4	57.1	71.4	71.4	71.4	42.9	85.7	14.3
10	COLUMBUS	23	88.9	100.0	36.8	22.2	44.4	77.8	33.3	12.5	22.2	62.5	66.7
10	DAYTON	39	100.0	83.3	**65.4**	91.7	50.0	83.3	75.0	75.0	8.3	58.3	25.0
11	ANN ARBOR	50	100.0	87.5	**64.7**	87.5	100.0	100.0	100.0	100.0	62.5	100.0	37.5
11	BATTLE CREEK	72	100.0	100.0	23.8	100.0	100.0	100.0	75.0	75.0	50.0	100.0	50.0
11	DETROIT	74	94.1	82.4	30.6	52.9	58.8	76.5	82.4	70.6	29.4	35.3	
12	CHICAGO-WEST SIDE	80	83.3	75.0	19.1	83.3		58.3	83.3	58.3	33.3	33.3	
12	MADISON	39	100.0	100.0	**67.6**	100.0	100.0	100.0	100.0	100.0		100.0	50.0
12	NORTH CHICAGO	144	97.4	95.0	50.9	77.5	72.5	47.5	67.5	57.5	45.0	67.5	45.0
13	MINNEAPOLIS	66	100.0	100.0	32.7	75.0	50.0	75.0	75.0	50.0		50.0	25.0
14	KNOXVILLE	63	97.7	97.7	38.6	95.5	43.2	56.8	63.6	59.1	36.4	52.3	27.3
17	DALLAS	70	100.0	100.0	23.1	100.0	100.0	100.0	100.0	100.0		100.0	
17	WACO	46											
19	DENVER	71	100.0	100.0	15.1	87.5	75.0	75.0	100.0	87.5	37.5	75.0	12.5
19	SOUTHERN COLORADO	111	100.0	100.0		100.0	100.0	100.0	100.0	100.0	33.3	100.0	33.3
20	AMERICAN LAKE	52	100.0	100.0	7.3	100.0	60.0	40.0	100.0	80.0	60.0	60.0	
20	BOISE	35	50.0	50.0	48.0	25.0	50.0	25.0	50.0		25.0	25.0	
20	PORTLAND	68	100.0	100.0	3.6	37.5	37.5	75.0	100.0	62.5		62.5	
20	SEATTLE	42	100.0	100.0	41.4	100.0	100.0	100.0	100.0	100.0	50.0	100.0	50.0
20	SPOKANE	15			38.5								
21	SAN FRANCISCO	39	100.0	100.0	6.5	66.7	11.1	88.9	88.9	66.7	11.1	33.3	
22	WEST LA	53	100.0	100.0	17.5	50.0	100.0	50.0	100.0	50.0	50.0	100.0	
	ALL SITES	3042	96.1	93.0	36.1	74.7	56.6	67.5	77.9	63.3	31.8	56.0	24.2
	SITE AVERAGE	66.1	95.3	92.1	35.4	74.6	67.2	71.0	81.7	66.6	35.9	62.0	34.2
	SITE STD. DEV.	30.3	10.3	12.9	22.1	23.9	27.0	22.2	19.8	25.5	17.0	25.3	17.2

^Outlined values do not meet the threshold level (25%) for the minimum standard. Bold/Underlined values represent positive outliers.
Source: Clinical Progress Reports

TABLE 2-16. CLIENT-RATED THERAPEUTIC ALLIANCE

6 Month Pre-Entry vs. Follow-up (median: 28 months)

VISN	SITE	1 Pre-Entry N	2 Pre-Entry Mean	3 Follow-up Mean (2+4)	4 Change at Follow-up	5 Percent Change (4/2)
1	BEDFORD	95	37.11	42.38	5.27	14.2%
1	BROCKTON	18	35.00	43.29	8.28	23.7%
1	TOGUS	27	33.27	37.60	4.33	13.0%
1	WEST HAVEN	22	33.82	42.57	8.75	25.9%
2	ALBANY	6	36.50	36.78	0.28	0.8%
2	BUFFALO	39	39.47	47.11	7.63	19.3%
2	CANANDAIGUA	43	35.34	38.48	3.14	8.9%
2	SYRACUSE	29	36.92	43.79	6.87	18.6%
3	BRONX					
3	BROOKLYN	52	34.74	39.11	4.37	12.6%
3	EAST ORANGE	22	34.82	36.75	1.93	5.6%
3	MONTROSE	50	32.63	33.18	0.55	1.7%
4	COATESVILLE	65	34.53	39.21	4.68	13.5%
4	PITTSBURGH	80	36.54	39.56	3.02	8.3%
5	PERRY POINT	72	35.42	39.39	3.97	11.2%
6	SALISBURY	26	38.30	41.13	2.83	7.4%
7	ATLANTA	43	36.86	39.56	2.70	7.3%
7	AUGUSTA	74	36.42	39.91	3.49	9.6%
7	TUSKEGEE	52	32.62	35.30	2.68	8.2%
8	GAINESVILLE	49	33.69	39.32	5.63	16.7%
8	MIAMI	46	35.10	39.09	3.98	11.4%
9	MOUNTAIN HOME	8	34.13	41.30	7.18	21.0%
10	CHILLICOTHE	55	38.30	41.40	3.10	8.1%
10	CINCINNATI	51	39.61	41.79	2.18	5.5%
10	CLEVELAND	38	32.98	39.71	6.73	20.4%
10	COLUMBUS	20	34.41	41.05	6.64	19.3%
10	DAYTON	39	40.15	49.17	9.02	22.5%
11	ANN ARBOR	36	35.05	38.08	3.03	8.7%
11	BATTLE CREEK	41	34.03	40.06	6.03	17.7%
11	DETROIT	42	33.42	34.23	0.81	2.4%
12	CHICAGO-WEST SIDE	55	37.30	43.62	6.31	16.9%
12	MADISON	38	38.56	39.23	0.67	1.7%
12	NORTH CHICAGO	122	35.48	34.65	-0.83	-2.4%
13	MINNEAPOLIS	58	32.47	36.24	3.78	11.6%
14	KNOXVILLE	50	32.63	38.72	6.09	18.7%
17	DALLAS	60	38.03	39.95	1.92	5.0%
17	WACO					
19	DENVER	61	37.24	41.31	4.07	10.9%
19	SOUTHERN COLORADO	82	34.77	32.81	-1.96	-5.6%
20	AMERICAN LAKE	38	35.61	38.80	3.19	9.0%
20	BOISE	33	33.58	39.21	5.64	16.8%
20	PORTLAND	37	37.27	39.20	1.94	5.2%
20	SEATTLE	26	38.74	42.24	3.49	9.0%
20	SPOKANE	13	38.79	46.73	7.94	20.5%
21	SAN FRANCISCO	28	38.55	42.37	3.82	9.9%
22	WEST LA	38	34.93	37.21	2.28	6.5%
	ALL SITES	1979	35.78	39.29	3.64	10.17%
	SITE AVERAGE	44.98	35.80	39.83	4.02	11.27%
	SITE STD. DEV.	22.90	2.15	3.40	2.54	7.13%

Change values are least squares means derived from analysis of covariance including site, time, baseline value, and eleven other baseline covariates

Outlined values represent significant t-test differences, in the undesired direction, between LS means for the indicated site and the median site on this variable.

Bold/Underlined values represent positive outliers.

Source: Client Interviews

TABLE 2-17. FIDELITY TO ASSERTIVE COMMUNITY TREATMENT MODEL

VISN	SITE	HUMAN RESOURCES	ORGANIZ'L BOUNDARIES	SERVICES	SUB. ABUSE TX	TOTAL SCORE	AVG SCORE
1	BEDFORD	4.3	4.1	3.8	4.7	92.0	4.2
1	BROCKTON	4.3	4.6	4.7	3.7	97.0	**4.4**
1	TOGUS	3.8	4.0	3.5	1.3	76.0	3.5
1	WEST HAVEN	4.3	4.7	4.2	3.3	94.0	4.3
2	ALBANY	4.3	4.3	3.7	5.0	93.0	4.2
2	BUFFALO	2.5	4.3	3.7	1.7	72.0	3.3
2	CANANDAIGUA	3.8	4.1	3.7	3.3	84.0	3.8
2	SYRACUSE	4.5	4.0	3.0	1.3	79.0	3.6
3	BRONX*						
3	BROOKLYN	4.0	4.0	3.2	3.7	82.0	3.7
3	EAST ORANGE	3.2	4.4	4.0	3.7	85.0	3.9
3	MONTROSE	3.8	5.0	3.3	1.7	83.0	3.8
4	COATESVILLE	3.8	5.0	4.2	3.7	94.0	4.3
4	PITTSBURGH	4.7	4.4	3.0	2.7	90.0	4.1
5	PERRY POINT	4.5	4.4	4.2	2.7	91.0	4.1
6	SALISBURY	4.3	4.1	3.8	3.0	87.0	4.0
7	ATLANTA	4.2	4.6	3.2	2.7	84.0	3.8
7	AUGUSTA	4.5	4.6	4.2	5.0	99.0	**4.5**
7	TUSKEGEE	4.2	4.3	4.3	2.7	89.0	4.0
8	GAINESVILLE	4.3	4.9	3.8	3.0	92.0	4.2
8	MIAMI	4.0	4.4	4.0	2.3	86.0	3.9
9	MOUNTAIN HOME	3.3	4.3	2.2	3.7	74.0	3.4
10	CHILLICOTHE	4.2	4.7	4.2	1.3	87.0	4.0
10	CINCINNATI	3.5	3.7	3.7	3.0	78.0	3.5
10	CLEVELAND	3.0	4.9	4.5	2.7	87.0	4.0
10	COLUMBUS	3.0	4.0	4.2	2.3	78.0	3.5
10	DAYTON	3.8	4.4	4.3	2.0	86.0	3.9
11	ANN ARBOR	4.8	4.7	4.0	4.0	98.0	**4.5**
11	BATTLE CREEK	3.2	4.7	4.2	2.7	85.0	3.9
11	DETROIT	4.8	4.0	3.3	2.0	83.0	3.8
12	CHICAGO-WEST SIDE	3.7	4.9	4.2	3.0	90.0	4.1
12	MADISON	4.8	4.9	4.0	5.0	102.0	**4.6**
12	NORTH CHICAGO	4.0	4.7	3.8	4.3	93.0	4.2
13	MINNEAPOLIS	4.5	5.0	4.3	3.3	98.0	**4.5**
14	KNOXVILLE	3.7	4.0	3.5	3.0	80.0	3.6
17	DALLAS	4.5	4.6	4.5	3.3	96.0	**4.4**
17	WACO*						
19	DENVER	4.2	4.4	3.7	2.3	85.0	3.9
19	SOUTHERN COLORADO	4.0	3.3	3.5	1.0	71.0	3.2
20	AMERICAN LAKE	4.5	4.6	4.0	2.7	91.0	4.1
20	BOISE	4.3	4.7	4.0	3.7	94.0	4.3
20	PORTLAND	4.2	4.4	5.0	3.3	91.0	4.1
20	SEATTLE	4.8	4.4	3.7	3.3	92.0	4.2
20	SPOKANE	4.2	4.4	3.3	1.3	80.0	3.6
21	SAN FRANCISCO*	2.8	4.1	3.5	2.7	72.0	3.4
22	WEST LA	4.0	4.1	4.0	3.3	87.0	4.0
	SITE AVERAGE	4.06	4.4	3.8	3.0	87.0	4.0
	SITE STD. DEV.	0.54	0.4	0.5	1.0	7.8	0.3

Source: Assertive Community Treatment Fidelity Scale from the FY 2000 Annual Progress Report.
Total score range: 22-110.

Outlined values exceed one standard deviation from the mean in undesired direction.

* Did not submit FY 2000 Annual Progress Report

TABLE 2-18. VA HOSPITAL USE: 183 DAYS PRE -vs- POST-ENTRY PTF FY00

			183 Days Pre -vs- Post-IDF						
			1	2	3	4	5	6	7
VISN	SITE	Total N FY00	N 183 Days	Pre-IDF MH Days/ Veteran	Post-IDF MH Days/ Veteran	Change MH Days/ Veteran (col.3-2)	% Change MH Days (4/2)	Change MH Cost*/ Veteran (4x$690)	Sum Change MH Cost*/ Program+ (6x1)
1	BEDFORD	131	107	42.8	23.5	-19.3	-45.1%	($13,323)	($1,425,540)
1	BROCKTON	81	50	127.1	14.8	**-112.3**	**-88.4%**	($77,515)	($3,875,730)
1	TOGUS	30	30	69.5	28.5	-41.0	-59.0%	($28,290)	($848,700)
1	WEST HAVEN	71	34	72.9	27.4	-45.4	-62.3%	($31,334)	($1,065,360)
2	ALBANY	44	17	41.7	14.5	-27.2	-65.2%	($18,752)	($318,780)
2	BUFFALO	80	56	13.0	4.5	-8.5	-65.3%	($5,865)	($328,440)
2	CANANDAIGUA	129	90	64.9	5.7	-59.2	**-91.2%**	($40,848)	($3,676,320)
2	SYRACUSE	66	40	40.1	14.1	-26.0	-64.8%	($17,923)	($716,910)
3	BRONX	56	43	35.2	11.5	-23.7	-67.2%	($16,335)	($702,420)
3	BROOKLYN	82	68	56.0	24.2	-31.8	-56.7%	($21,928)	($1,491,090)
3	EAST ORANGE	37	35	41.1	17.6	-23.5	-57.1%	($16,205)	($567,180)
3	MONTROSE	129	87	146.5	27.8	**-118.7**	-81.0%	($81,896)	($7,124,940)
4	COATESVILLE	78	75	70.5	14.2	-56.3	-79.9%	($38,852)	($2,913,870)
4	PITTSBURGH	107	99	75.0	19.5	-55.6	-74.1%	($38,347)	($3,796,380)
5	PERRY POINT	108	99	138.8	19.7	**-119.0**	**-85.8%**	($82,138)	($8,131,650)
6	SALISBURY	44	35	147.3	56.3	**-91.0**	-61.8%	($62,810)	($2,198,340)
7	ATLANTA	56	53	45.3	11.7	-33.6	-74.1%	($23,161)	($1,227,510)
7	AUGUSTA	75	71	129.0	18.2	**-110.9**	**-85.9%**	($76,493)	($5,430,990)
7	TUSKEGEE	74	65	60.9	23.2	-37.6	-61.8%	($25,976)	($1,688,430)
8	GAINESVILLE	66	61	32.8	6.4	-26.5	-80.6%	($18,257)	($1,113,660)
8	MIAMI	53	51	41.1	25.0	-16.1	-39.2%	($11,108)	($566,490)
9	MOUNTAIN HOME	8	8	17.0	5.3	-11.8	-69.1%	($8,108)	($64,860)
10	CHILLICOTHE	62	61	67.7	24.9	-42.8	-63.2%	($29,500)	($1,799,520)
10	CINCINNATI	55	48	20.9	10.0	-10.9	-52.2%	($7,518)	($360,870)
10	CLEVELAND	68	58	96.5	37.8	-58.7	-60.8%	($40,472)	($2,347,380)
10	COLUMBUS	23	20	26.4	17.7	-8.7	-33.0%	($6,003)	($120,060)
10	DAYTON	39	35	12.8	10.0	-2.8	-22.0%	($1,952)	($68,310)
11	ANN ARBOR	50	47	35.6	11.4	-24.2	-67.9%	($16,692)	($784,530)
11	BATTLE CREEK	72	68	80.2	22.0	-58.2	-72.5%	($40,132)	($2,728,950)
11	DETROIT	74	67	35.6	15.8	-19.8	-55.6%	($13,676)	($916,320)
12	CHICAGO-WEST SIDE	80	67	48.1	18.3	-29.8	-61.9%	($20,535)	($1,375,860)
12	MADISON	39	39	46.2	11.4	-34.9	-75.4%	($24,062)	($938,400)
12	NORTH CHICAGO	144	137	75.9	13.0	-62.9	-82.8%	($43,405)	($5,946,420)
13	MINNEAPOLIS	66	62	82.7	6.3	**-76.5**	**-92.4%**	($52,752)	($3,270,600)
14	KNOXVILLE	63	44	24.9	10.5	-14.4	-57.7%	($9,911)	($436,080)
17	DALLAS	70	68	41.7	9.6	-32.1	-76.9%	($22,121)	($1,504,200)
17	WACO	46	46	86.1	6.6	**-79.5**	**-92.3%**	($54,855)	($2,523,330)
19	DENVER	71	58	56.1	18.5	-37.6	-67.0%	($25,911)	($1,502,820)
19	SOUTHERN COLORADO	111	6	10.0	0.0	-10.0	**-100.0%**	($6,900)	($41,400)
20	AMERICAN LAKE	52	46	61.2	20.3	-40.8	-66.8%	($28,185)	($1,296,510)
20	BOISE	35	33	11.1	9.5	-1.5	-13.9%	($1,066)	($35,190)
20	PORTLAND	68	65	36.6	14.4	-22.1	-60.6%	($15,276)	($992,910)
20	SEATTLE	42	38	30.8	5.5	-25.3	-82.2%	($17,486)	($664,470)
20	SPOKANE	15	13	10.2	8.0	-2.2	-21.8%	($1,539)	($20,010)
21	SAN FRANCISCO	39	35	38.4	11.5	-27.0	-70.2%	($18,610)	($651,360)
22	WEST LA	53	52	64.4	33.2	-31.2	-48.4%	($21,496)	($1,117,800)
	All Sites	3042	2487	64.4	17.3	-47.2	-73.2%	($32,551)	($80,954,143)
	Site Average	66.1	54.1	56.7	16.5	-40.2	-65.5%	($27,729)	($1,754,715)
	Standard Deviation	29.9	25.9	35.7	10.0	30.8	18.6%	$21,243	$1,847,960

* FY 2000 National general psychiatry per diem = $690 (NMHPPMS).
Total N FY00= IDF3 table <10/01/00 (including terminated) (537/546/648 IDF3 + MHICM table)
+ Column 7 data do not fully represent cost reductions achieved by original MHI sites.

Outlined values exceed one standard deviation from the site average in undesired direction.
Bold/Underlined values represent positive outliers.

Source: VA automated Patient Treatment File FY00; NMHPPMS FY00

TABLE 2-18a.VA HOSPITAL USE: 365 DAYS PRE -vs- POST-ENTRY PTF FY00

VISN	SITE	Total N FY00	365 Days Pre -vs- Post-IDF: 1 N 365 Days	2 Pre-IDF MH Days/ Veteran	3 Post-IDF MH Days/ Veteran	4 Change MH Days/ Veteran (col.3-2)	5 % Change MH Days (Post-Pre) (4/2)	6 Change MH Cost*/ Veteran (4x$690)	7 Sum Change MH Cost*/ Program+ (6x1)
1	BEDFORD	131	94	80.7	36.5	-44.2	-54.8%	($30,499)	($2,866,950)
1	BROCKTON	81	48	231.3	33.1	**-198.1**	**-85.7%**	($136,706)	($6,561,900)
1	TOGUS	30	28	113.7	42.9	-70.8	-62.3%	($48,842)	($1,367,580)
1	WEST HAVEN	71	30	125.7	46.4	-79.3	-63.1%	($54,717)	($1,641,510)
2	ALBANY	44	17	52.9	19.8	-33.1	-62.6%	($22,851)	($388,470)
2	BUFFALO	80	45	20.9	11.1	-9.8	-46.9%	($6,762)	($304,290)
2	CANANDAIGUA	129	85	128.7	14.8	-113.9	**-88.5%**	($78,579)	($6,679,200)
2	SYRACUSE	66	37	50.4	23.9	-26.5	-52.6%	($18,294)	($676,890)
3	BRONX	56	43	47.9	19.0	-28.9	-60.4%	($19,946)	($857,670)
3	BROOKLYN	82	62	84.9	42.4	-42.5	-50.1%	($29,358)	($1,820,220)
3	EAST ORANGE	37	28	57.3	31.2	-26.0	-45.5%	($17,965)	($503,010)
3	MONTROSE	129	75	286.7	64.0	**-222.7**	-77.7%	($153,695)	($11,527,140)
4	COATESVILLE	78	69	121.3	24.6	-96.8	-79.8%	($66,780)	($4,607,820)
4	PITTSBURGH	107	88	111.9	34.1	-77.9	-69.6%	($53,734)	($4,728,570)
5	PERRY POINT	108	91	227.7	37.6	**-190.1**	**-83.5%**	($131,168)	($11,936,310)
6	SALISBURY	44	34	290.4	76.6	**-213.8**	-73.6%	($147,498)	($5,014,920)
7	ATLANTA	56	48	56.8	18.8	-38.0	-66.8%	($26,191)	($1,257,180)
7	AUGUSTA	75	68	212.9	29.8	**-183.2**	**-86.0%**	($126,402)	($8,595,330)
7	TUSKEGEE	74	56	102.4	37.9	-64.6	-63.0%	($44,542)	($2,494,350)
8	GAINESVILLE	66	58	53.6	12.4	-41.1	-76.8%	($28,361)	($1,644,960)
8	MIAMI	53	51	61.9	38.7	-23.2	-37.5%	($16,005)	($816,270)
9	MOUNTAIN HOME	8	8	27.0	5.3	-21.8	**-80.6%**	($15,008)	($120,060)
10	CHILLICOTHE	62	55	117.8	39.4	-78.4	-66.5%	($54,083)	($2,974,590)
10	CINCINNATI	55	32	29.9	17.4	-12.5	-41.8%	($8,625)	($276,000)
10	CLEVELAND	68	48	174.5	70.9	-103.6	-59.4%	($71,516)	($3,432,750)
10	COLUMBUS	23	17	44.5	32.4	-12.1	-27.2%	($8,361)	($142,140)
10	DAYTON	39	27	21.2	15.5	-5.7	-27.1%	($3,961)	($106,950)
11	ANN ARBOR	50	42	56.4	22.7	-33.6	-59.7%	($23,214)	($974,970)
11	BATTLE CREEK	72	65	148.3	46.4	-101.9	-68.7%	($70,295)	($4,569,180)
11	DETROIT	74	56	57.9	22.4	-35.5	-61.3%	($24,495)	($1,371,720)
12	CHICAGO-WEST SIDE	80	59	73.0	35.7	-37.4	-51.1%	($25,776)	($1,520,760)
12	MADISON	39	38	72.9	15.6	-57.3	-78.6%	($39,548)	($1,502,820)
12	NORTH CHICAGO	144	108	132.9	26.6	-106.3	**-80.0%**	($73,351)	($7,921,890)
13	MINNEAPOLIS	66	61	121.2	11.4	-109.8	**-90.6%**	($75,764)	($4,621,620)
14	KNOXVILLE	63							
17	DALLAS	70	66	57.5	15.9	-41.6	-72.3%	($28,687)	($1,893,360)
17	WACO	46	46	124.6	17.6	-107.0	**-85.9%**	($73,830)	($3,396,180)
19	DENVER	71	57	80.6	31.4	-49.2	-61.0%	($33,943)	($1,934,760)
19	SOUTHERN COLORADO	111							
20	AMERICAN LAKE	52	42	85.6	30.6	-55.1	-64.3%	($37,999)	($1,595,970)
20	BOISE	35	29	23.4	13.6	-9.8	-41.7%	($6,733)	($195,270)
20	PORTLAND	68	61	45.6	18.6	-27.0	-59.3%	($18,653)	($1,137,810)
20	SEATTLE	42	37	49.7	15.8	-33.9	-68.2%	($23,404)	($865,950)
20	SPOKANE	15	13	11.4	8.3	-3.1	-27.0%	($2,123)	($27,600)
21	SAN FRANCISCO	39	30	53.5	12.4	-41.1	-76.8%	($28,359)	($850,770)
22	WEST LA	53	51	94.7	44.7	-50.1	-52.8%	($34,541)	($1,761,570)
	All Sites	3042	2203	109.3	30.4	-78.9	-72.2%	($54,439)	($119,928,305)
	Site Average	66.1	50.1	96.0	28.8	-67.2	-63.4%	($46,390)	($2,715,573)
	Standard Deviation	29.9	22.1	67.3	15.9	57.1	16.6%	$39,391	$2,902,204

* FY 2000 National general psychiatry per diem = $690 (NMHPPMS).
Total N FY00= IDF3 table <10/01/00 (including terminated) (537/546/648 IDF3 + MHICM table)
+ Column 7 data do not fully represent cost reductions achieved by original MHI sites.

Outlined values exceed one standard deviation from the site average in undesired direction.
Bold/Underlined values represent positive outliers.

Source: VA automated Patient Treatment File FY00; NMHPPMS FY00

TABLE 2-18b.VA HOSPITAL USE: 548 DAYS PRE -vs- POST-ENTRY PTF FY00

VISN	SITE	Total N FY00	548 Days Pre -vs- Post-IDF 1 N 548 Days	2 Pre-IDF MH Days/ Veteran	3 Post-IDF MH Days/ Veteran	4 Change MH Days/ Veteran (col.3-2)	5 % Change MH Days (4/2)	6 Change MH Cost */ Veteran (4x$690)	7 Sum Change MH Cost */ Program+ (6x1)
1	BEDFORD	131	90	119.0	46.1	-73.0	-61.3%	($50,339)	($4,530,540)
1	BROCKTON	81	47	319.6	49.3	**-270.3**	**-84.6%**	($186,535)	($8,767,140)
1	TOGUS	30	27	151.5	54.8	-96.7	-63.8%	($66,700)	($1,800,900)
1	WEST HAVEN	71	25	170.8	69.5	-101.3	-59.3%	($69,911)	($1,747,770)
2	ALBANY	44	17	63.9	26.1	-37.8	-59.1%	($26,058)	($442,980)
2	BUFFALO	80	35	33.7	21.9	-11.8	-35.0%	($8,142)	($284,970)
2	CANANDAIGUA	129	82	200.0	18.0	**-182.0**	**-91.0%**	($125,588)	($10,298,250)
2	SYRACUSE	66	31	56.5	34.1	-22.5	-39.8%	($15,514)	($480,930)
3	BRONX	56	43	65.3	24.7	-40.6	-62.2%	($27,985)	($1,203,360)
3	BROOKLYN	82	58	106.2	58.2	-48.0	-45.2%	($33,108)	($1,920,270)
3	EAST ORANGE	37	23	76.0	44.7	-31.3	-41.2%	($21,630)	($497,490)
3	MONTROSE	129	69	411.4	97.2	**-314.2**	-76.4%	($216,820)	($14,960,580)
4	COATESVILLE	78	67	172.2	32.5	-139.7	-81.1%	($96,384)	($6,457,710)
4	PITTSBURGH	107	78	136.6	39.0	-97.6	-71.5%	($67,337)	($5,252,280)
5	PERRY POINT	108	82	319.2	47.0	**-272.2**	**-85.3%**	($187,831)	($15,402,180)
6	SALISBURY	44	34	407.0	91.2	**-315.8**	-77.6%	($217,878)	($7,407,840)
7	ATLANTA	56	45	73.9	20.5	-53.3	-72.2%	($36,800)	($1,656,000)
7	AUGUSTA	75	63	303.3	40.8	**-262.5**	**-86.6%**	($181,152)	($11,412,600)
7	TUSKEGEE	74	42	172.7	59.0	-113.7	-65.8%	($78,463)	($3,295,440)
8	GAINESVILLE	66	54	67.2	14.9	-52.3	-77.9%	($36,097)	($1,949,250)
8	MIAMI	53	51	77.9	54.1	-23.8	-30.6%	($16,425)	($837,660)
9	MOUNTAIN HOME	8	8	45.3	5.3	-40.0	**-88.4%**	($27,600)	($220,800)
10	CHILLICOTHE	62	51	173.8	47.9	-125.9	-72.4%	($86,872)	($4,430,490)
10	CINCINNATI	55	8	60.3	45.0	-15.3	-25.3%	($10,523)	($84,180)
10	CLEVELAND	68	46	240.6	90.4	-150.2	-62.4%	($103,635)	($4,767,210)
10	COLUMBUS	23	8	49.1	41.0	-8.1	-16.5%	($5,606)	($44,850)
10	DAYTON	39	18	37.1	17.1	-20.0	-54.0%	($13,800)	($248,400)
11	ANN ARBOR	50	39	76.0	28.2	-47.8	-62.9%	($32,978)	($1,286,160)
11	BATTLE CREEK	72	64	211.5	63.6	-148.0	-69.9%	($102,098)	($6,534,300)
11	DETROIT	74	41	87.7	30.7	-57.0	-65.0%	($39,347)	($1,613,220)
12	CHICAGO-WEST SIDE	80	54	101.3	49.3	-52.0	-51.4%	($35,906)	($1,938,900)
12	MADISON	39	34	89.1	17.0	-72.1	-80.9%	($49,721)	($1,690,500)
12	NORTH CHICAGO	144	80	210.3	30.1	**-180.2**	**-85.7%**	($124,347)	($9,947,730)
13	MINNEAPOLIS	66	56	161.2	12.1	-149.2	**-92.5%**	($102,933)	($5,764,260)
14	KNOXVILLE	63							
17	DALLAS	70	65	71.8	20.5	-51.3	-71.5%	($35,392)	($2,300,460)
17	WACO	46	37	163.6	24.0	-139.6	**-85.3%**	($96,302)	($3,563,160)
19	DENVER	71	48	101.3	47.2	-54.2	-53.5%	($37,375)	($1,794,000)
19	SOUTHERN COLORADO	111							
20	AMERICAN LAKE	52	41	115.3	34.7	-80.6	-69.9%	($55,604)	($2,279,760)
20	BOISE	35	28	36.8	19.3	-17.5	-47.6%	($12,100)	($338,790)
20	PORTLAND	68	55	52.4	26.3	-26.1	-49.7%	($17,990)	($989,460)
20	SEATTLE	42	36	55.9	24.7	-31.3	-55.9%	($21,582)	($776,940)
20	SPOKANE	15	13	11.4	10.0	-1.4	-12.2%	($955)	($12,420)
21	SAN FRANCISCO	39	28	59.4	14.5	-44.9	-75.6%	($30,976)	($867,330)
22	WEST LA	53	49	131.5	53.1	-78.4	-59.6%	($54,073)	($2,649,600)
	All Sites	3042	1970	154.7	40.6	-114.2	-73.8%	($78,778)	($155,193,615)
	Site Average	66.1	44.8	132.9	38.5	-94.3	-63.1%	($65,100)	($3,517,024)
	Standard Deviation	29.9	20.8	96.8	21.5	83.7	19.6%	$57,777	$3,899,422

* FY 2000 National general psychiatry per diem = $690 (NMHPPMS).
Total N FY00= IDF3 table <10/01/00 (including terminated) (537/546/648 IDF3 + MHICM table)
+ Column 7 data do not fully represent cost reductions achieved by original MHI sites.

Outlined values exceed one standard deviation from the site average in undesired direction.
Bold/Underlined values represent positive outliers.

Source: VA automated Patient Treatment File FY00; NMHPPMS FY00

TABLE 2-18c. VA HOSPITAL USE: 730 DAYS PRE -vs- POST-ENTRY PTF FY00

			730 Days Pre -vs- Post-IDF						
			1	2	3	4	5	6	7
VISN	SITE	Total N FY00	N 730 Days	Pre-IDF MH Days/ Veteran	Post-IDF MH Days/ Veteran	Change MH Days/ Veteran (col.3-2)	% Change MH Days (4/2)	Change MH Cost */ Veteran (4x$690)	Sum Change MH Cost */ Program+ (6x1)
1	BEDFORD	131	75	149.2	56.5	-92.6	-62.1%	($63,903)	($4,792,740)
1	BROCKTON	81	45	407.8	63.0	**-344.8**	**-84.6%**	($237,912)	($10,706,040)
1	TOGUS	30	25	201.9	66.6	-135.2	-67.0%	($93,316)	($2,332,890)
1	WEST HAVEN	71	17	246.8	119.2	-127.6	-51.7%	($88,076)	($1,497,300)
2	ALBANY	44	17	72.9	33.1	-39.8	-54.6%	($27,478)	($467,130)
2	BUFFALO	80	25	53.6	21.6	-32.0	-59.7%	($22,052)	($551,310)
2	CANANDAIGUA	129	79	275.9	24.4	**-251.6**	**-91.2%**	($173,583)	($13,713,060)
2	SYRACUSE	66	25	68.5	53.1	-15.4	-22.5%	($10,626)	($265,650)
3	BRONX	56	43	76.1	34.4	-41.7	-54.8%	($28,755)	($1,236,480)
3	BROOKLYN	82	49	124.6	74.1	-50.5	-40.5%	($34,838)	($1,707,060)
3	EAST ORANGE	37	23	88.4	49.6	-38.8	-43.9%	($26,790)	($616,170)
3	MONTROSE	129	64	515.1	131.6	**-383.6**	-74.5%	($264,669)	($16,938,810)
4	COATESVILLE	78	60	221.2	42.7	-178.5	-80.7%	($123,165)	($7,389,900)
4	PITTSBURGH	107	67	177.9	47.3	-130.6	-73.4%	($90,081)	($6,035,430)
5	PERRY POINT	108	75	401.7	57.9	**-343.9**	**-85.6%**	($237,259)	($17,794,410)
6	SALISBURY	44	34	512.4	106.8	**-405.6**	-79.2%	($279,856)	($9,515,100)
7	ATLANTA	56	42	91.4	29.0	-62.4	-68.3%	($43,059)	($1,808,490)
7	AUGUSTA	75	60	384.6	54.9	**-329.7**	**-85.7%**	($227,505)	($13,650,270)
7	TUSKEGEE	74	35	235.2	73.2	-162.0	-68.9%	($111,800)	($3,912,990)
8	GAINESVILLE	66	53	77.7	16.8	-60.9	-78.3%	($42,012)	($2,226,630)
8	MIAMI	53	51	93.7	70.0	-23.7	-25.3%	($16,357)	($834,210)
9	MOUNTAIN HOME	8	8	45.3	6.1	-39.1	**-86.5%**	($26,996)	($215,970)
10	CHILLICOTHE	62	47	227.0	58.0	-169.0	-74.5%	($116,625)	($5,481,360)
10	CINCINNATI	55							
10	CLEVELAND	68	42	294.0	113.3	-180.7	-61.5%	($124,660)	($5,235,720)
10	COLUMBUS	23							
10	DAYTON	39							
11	ANN ARBOR	50	36	106.3	32.5	-73.8	-69.4%	($50,888)	($1,831,950)
11	BATTLE CREEK	72	64	281.1	83.9	-197.1	-70.1%	($136,027)	($8,705,730)
11	DETROIT	74	27	124.5	38.7	-85.9	-68.9%	($59,238)	($1,599,420)
12	CHICAGO-WEST SIDE	80	49	114.2	60.4	-53.8	-47.1%	($37,119)	($1,818,840)
12	MADISON	39	32	105.0	27.7	-77.3	-73.6%	($53,346)	($1,707,060)
12	NORTH CHICAGO	144	65	294.7	42.0	**-252.7**	**-85.7%**	($174,347)	($11,332,560)
13	MINNEAPOLIS	66	52	191.7	14.6	-177.0	**-92.4%**	($122,143)	($6,351,450)
14	KNOXVILLE	63							
17	DALLAS	70	65	85.6	24.3	-61.3	-71.6%	($42,292)	($2,748,960)
17	WACO	46	25	219.6	47.5	-172.2	-78.4%	($118,790)	($2,969,760)
19	DENVER	71	43	112.1	57.8	-54.3	-48.4%	($37,453)	($1,610,460)
19	SOUTHERN COLORADO	111							
20	AMERICAN LAKE	52	37	140.5	39.9	-100.6	-71.6%	($69,392)	($2,567,490)
20	BOISE	35	28	53.5	23.4	-30.1	-56.2%	($20,749)	($580,980)
20	PORTLAND	68	51	64.1	34.8	-29.4	-45.8%	($20,267)	($1,033,620)
20	SEATTLE	42	35	69.3	28.2	-41.1	-59.3%	($28,389)	($993,600)
20	SPOKANE	15	13	14.4	10.9	-3.5	-24.1%	($2,388)	($31,050)
21	SAN FRANCISCO	39	23	60.3	21.3	-39.0	-64.6%	($26,910)	($618,930)
22	WEST LA	53	45	159.4	66.6	-92.8	-58.2%	($64,047)	($2,882,130)
	All Sites	3042	1751	200.4	52.4	-148.0	-73.9%	($102,132)	($178,833,389)
	Site Average	66.1	42.7	176.6	50.2	-126.4	-64.9%	($87,199)	($4,349,003)
	Standard Deviation	29.9	18.0	125.8	29.1	108.2	17.5%	$74,628	$4,710,702

* FY 2000 National general psychiatry per diem = $690 (NMHPPMS).
Total N FY00= IDF3 table <10/01/00 (including terminated) (537/546/648 IDF3 + MHICM table)
+ Column 7 data do not fully represent cost reductions achieved by original MHI sites.

Outlined values exceed one standard deviation from the site average in undesired direction.
Bold/Underlined values represent positive outliers.

Source: VA automated Patient Treatment File FY00; NMHPPMS FY00

TABLE 2-19. BRIEF PSYCHIATRIC RATING SCALE

Pre-Entry vs. Follow-up

VISN	SITE	1 Pre-Entry N	2 Pre-Entry Mean	3 Follow-up Mean (2+4)	4 Change at Follow-up	5 Percent Change (4/2)
1	BEDFORD	117	35.47	29.79	-5.69	-16.03%
1	BROCKTON	30	42.03	34.41	-7.63	-18.14%
1	TOGUS	30	32.10	25.99	-6.11	-19.04%
1	WEST HAVEN	30	42.16	45.51	3.36	7.96%
2	ALBANY	6	58.17	52.65	-5.52	-9.49%
2	BUFFALO	45	32.52	24.17	-8.35	-25.68%
2	CANANDAIGUA	59	38.44	37.29	-1.15	-2.99%
2	SYRACUSE	40	44.55	49.45	4.90	11.00%
3	BRONX					
3	BROOKLYN	79	41.50	39.49	-2.01	-4.83%
3	EAST ORANGE	37	33.26	22.31	-10.95	-32.92%
3	MONTROSE	75	46.32	53.24	6.92	14.95%
4	COATESVILLE	78	42.11	36.75	-5.36	-12.74%
4	PITTSBURGH	104	38.13	33.59	-4.54	-11.91%
5	PERRY POINT	104	46.52	47.59	1.06	2.28%
6	SALISBURY	41	36.22	28.85	-7.37	-20.34%
7	ATLANTA	55	34.30	22.42	**-11.88**	-34.64%
7	AUGUSTA	75	31.07	18.78	**-12.30**	-39.57%
7	TUSKEGEE	69	36.64	23.88	**-12.76**	-34.83%
8	GAINESVILLE	64	48.83	43.46	-5.37	-11.00%
8	MIAMI	51	35.58	30.27	-5.31	-14.93%
9	MOUNTAIN HOME	8	37.75	35.71	-2.04	-5.40%
10	CHILLICOTHE	62	33.72	28.02	-5.70	-16.90%
10	CINCINNATI	54	28.71	25.90	-2.81	-9.78%
10	CLEVELAND	64	42.94	31.24	**-11.70**	-27.25%
10	COLUMBUS	23	44.03	38.64	-5.39	-12.25%
10	DAYTON	39	28.77	17.04	**-11.73**	-40.79%
11	ANN ARBOR	49	41.16	41.00	-0.16	-0.39%
11	BATTLE CREEK	70	38.27	29.55	-8.72	-22.78%
11	DETROIT	73	34.95	22.18	**-12.76**	-36.52%
12	CHICAGO-WEST SIDE	78	30.38	23.38	-7.00	-23.03%
12	MADISON	39	38.16	38.93	0.78	2.03%
12	NORTH CHICAGO	141	35.37	28.72	-6.65	-18.80%
13	MINNEAPOLIS	64	41.71	56.17	14.46	34.67%
14	KNOXVILLE	58	43.33	45.91	2.59	5.97%
17	DALLAS	69	40.04	38.48	-1.56	-3.91%
17	WACO					
19	DENVER	69	34.31	26.06	-8.25	-24.04%
19	SOUTHERN COLORADO	99	33.45	26.03	-7.42	-22.18%
20	AMERICAN LAKE	51	46.99	48.13	1.15	2.44%
20	BOISE	35	37.09	32.00	-5.08	-13.71%
20	PORTLAND	68	39.51	38.04	-1.47	-3.72%
20	SEATTLE	41	55.37	59.61	4.25	7.67%
20	SPOKANE	15	46.53	45.14	-1.39	-2.99%
21	SAN FRANCISCO	36	40.90	36.73	-4.17	-10.20%
22	WEST LA	53	44.11	51.56	7.45	16.88%
	ALL SITES	2547	39.17	34.90	-3.92	-10.01%
	SITE AVERAGE	57.89	39.40	35.55	-3.85	-11.29%
	SITE STD. DEV.	27.77	6.42	10.81	5.93	16.05%

Change values are least squares means derived from analysis of covariance adjusted for site, time, baseline value, and eleven other baseline covariates.

Outlined values represent significant t-test differences, in the undesired direction, between LS means for the indicated site and the median site on this variable.

Bold/Underlined values represent positive outliers.

Source: Client Interviews

TABLE 2-20. SYMPTOM SEVERITY

Pre-Entry vs. Follow-up

VISN	SITE	1 Pre-Entry N	2 Pre-Entry Mean	3 Follow-up Mean (2+4)	4 Change at Follow-up	5 Percent Change (4/2)
1	BEDFORD	118	2.06	1.84	-0.22	-10.78%
1	BROCKTON	25	1.68	1.39	-0.28	-16.86%
1	TOGUS	29	2.04	1.56	-0.47	-23.29%
1	WEST HAVEN	29	2.09	1.87	-0.23	-10.88%
2	ALBANY	6	2.37	1.97	-0.40	-16.71%
2	BUFFALO	43	1.95	1.82	-0.12	-6.22%
2	CANANDAIGUA	56	1.89	1.61	-0.28	-15.05%
2	SYRACUSE	40	2.31	2.20	-0.11	-4.65%
3	BRONX					
3	BROOKLYN	76	2.16	1.97	-0.19	-8.93%
3	EAST ORANGE	36	2.04	1.91	-0.14	-6.68%
3	MONTROSE+	65	1.98	1.97	-0.01	-0.26%
4	COATESVILLE	77	1.88	1.56	-0.31	-16.73%
4	PITTSBURGH	90	1.74	1.51	-0.23	-12.94%
5	PERRY POINT	84	1.75	1.61	-0.14	-8.25%
6	SALISBURY	35	1.63	1.44	-0.20	-12.22%
7	ATLANTA	53	2.15	2.06	-0.09	-4.27%
7	AUGUSTA	75	1.83	1.67	-0.16	-8.62%
7	TUSKEGEE	69	1.99	1.69	-0.30	-15.21%
8	GAINESVILLE	64	2.17	1.88	-0.29	-13.46%
9	MOUNTAIN HOME	8	2.48	2.34	-0.14	-5.51%
10	CHILLICOTHE	61	1.75	1.56	-0.19	-10.85%
10	CINCINNATI	54	2.21	2.16	-0.06	-2.56%
10	CLEVELAND	47	1.86	1.52	-0.34	-18.43%
10	COLUMBUS	22	2.52	2.15	-0.37	-14.84%
10	DAYTON	39	1.84	1.32	**-0.52**	-28.31%
11	ANN ARBOR	49	2.05	1.77	-0.28	-13.47%
11	BATTLE CREEK	65	1.88	1.36	**-0.52**	-27.62%
11	DETROIT	71	1.92	1.66	-0.26	-13.45%
12	MADISON	39	1.91	1.96	0.05	2.55%
12	NORTH CHICAGO	135	1.84	1.65	-0.19	-10.19%
13	MINNEAPOLIS	62	1.98	1.98	0.00	-0.20%
14	KNOXVILLE	58	2.05	1.85	-0.20	-9.85%
17	DALLAS	68	2.21	2.11	-0.11	-4.82%
17	WACO					
19	DENVER	68	1.96	1.57	-0.39	-20.00%
19	SOUTHERN COLORADO	94	1.92	1.68	-0.24	-12.67%
20	AMERICAN LAKE	47	2.19	1.99	-0.20	-9.31%
20	BOISE	34	2.18	1.99	-0.19	-8.55%
20	SEATTLE	40	2.39	2.33	-0.06	-2.68%
20	SPOKANE	15	2.26	1.83	-0.43	-18.93%
21	SAN FRANCISCO	35	1.94	1.65	-0.29	-14.73%
22	WEST LA	45	2.13	1.88	-0.25	-11.56%
	ALL SITES	2226	1.99	1.78	-0.22	-10.99%
	SITE AVERAGE	54.29	2.03	1.80	-0.23	-11.40%
	SITE STD. DEV.	26.90	0.21	0.26	0.13	6.79%

Change values are least squares means derived from analysis of covariance adjusted for site, time, baseline value, and eleven other baseline covariates.

Outlined values represent significant t-test differences, in the undesired direction, between LS means for the indicated site and the median site on this variable.

Bold/Underlined values represent positive outliers.

TABLE 2-21. GLOBAL ASSESSMENT OF FUNCTIONING

Pre-Entry vs. Follow-up

VISN	SITE	1 Pre-Entry N	2 Pre-Entry Mean	3 Follow-up Mean (2+4)	4 Change at Follow-up	5 Percent Change (4/2)
1	BEDFORD	115	43.22	44.25	**1.03**	2.39%
1	BROCKTON	30	31.53	21.56	-9.97	-31.62%
1	TOGUS	30	48.77	34.00	-14.77	-30.29%
1	WEST HAVEN	30	31.67	22.05	-9.62	-30.37%
2	ALBANY	6	35.67	31.80	-3.86	-10.83%
2	BUFFALO	47	37.34	19.51	-17.83	-47.76%
2	CANANDAIGUA	59	35.93	23.17	-12.76	-35.52%
2	SYRACUSE	41	39.90	43.14	**3.24**	8.11%
3	BRONX					
3	BROOKLYN	79	38.18	42.09	**3.91**	10.24%
3	EAST ORANGE	37	39.14	38.43	-0.70	-1.79%
3	MONTROSE	75	41.77	39.85	-1.93	-4.61%
4	COATESVILLE	78	38.91	45.53	**6.62**	17.02%
4	PITTSBURGH	103	35.83	32.57	-3.25	-9.08%
5	PERRY POINT	104	42.62	38.67	-3.94	-9.26%
6	SALISBURY	41	40.73	41.15	0.42	1.04%
7	ATLANTA	55	46.44	55.29	**8.86**	19.08%
7	AUGUSTA	75	44.63	51.71	**7.08**	15.87%
7	TUSKEGEE	68	50.29	63.70	**13.40**	26.65%
8	GAINESVILLE	64	44.38	45.77	**1.40**	3.15%
8	MIAMI	51	42.76	37.15	-5.62	-13.13%
9	MOUNTAIN HOME	8	59.63	52.43	-7.19	-12.06%
10	CHILLICOTHE	62	40.31	37.82	-2.49	-6.18%
10	CINCINNATI	53	43.40	43.09	-0.30	-0.70%
10	CLEVELAND	64	31.59	24.42	-7.18	-22.71%
10	COLUMBUS	23	43.52	52.51	**8.99**	20.66%
10	DAYTON	39	55.21	64.05	**8.85**	16.02%
11	ANN ARBOR	49	36.76	32.70	-4.05	-11.03%
11	BATTLE CREEK	71	50.23	57.79	**7.57**	15.07%
11	DETROIT	73	44.41	50.04	**5.63**	12.68%
12	CHICAGO-WEST SIDE	78	39.94	36.93	-3.00	-7.52%
12	MADISON	39	45.97	45.49	-0.49	-1.06%
12	NORTH CHICAGO	140	35.14	23.00	-12.14	-34.56%
13	MINNEAPOLIS	64	38.73	28.55	-10.18	-26.29%
14	KNOXVILLE	58	33.60	27.74	-5.87	-17.45%
17	DALLAS	69	43.39	35.10	-8.29	-19.12%
17	WACO					
19	DENVER	69	39.77	38.07	-1.70	-4.27%
19	SOUTHERN COLORADO	97	42.38	45.88	3.50	8.26%
20	AMERICAN LAKE	51	40.41	30.84	-9.57	-23.69%
20	BOISE	35	43.43	34.26	-9.17	-21.10%
20	PORTLAND	68	32.87	30.22	-2.65	-8.05%
20	SEATTLE	40	39.68	34.62	-5.05	-12.73%
20	SPOKANE	15	42.40	41.22	-1.18	-2.79%
21	SAN FRANCISCO	37	36.51	39.04	**2.52**	6.91%
22	WEST LA	53	46.94	49.49	**2.54**	5.42%
	ALL SITES	2543	40.83	38.87	-2.01	-4.92%
	SITE AVERAGE	57.80	41.27	39.24	-2.03	-6.04%
	SITE STD. DEV.	27.47	5.95	10.96	6.98	17.16%

Change values are least squares means derived from analysis of covariance adjusted for site, time, baseline value, and eleven other baseline covariates.

Outlined values represent significant t-test differences, in the undesired direction, between LS means for the indicated site and the median site on this variable.

Bold/Underlined values represent positive outliers.

Source: Client Interviews

TABLE 2-22. INSTRUMENTAL ACTIVITIES OF DAILY LIVING

Pre-Entry vs. Follow-up

VISN	SITE	1 Pre-Entry N	2 Pre-Entry Mean	3 Follow-up Mean (2+4)	4 Change at Follow-up	5 Percent Change (4/2)
1	BEDFORD	115	47.69	50.43	2.74	5.75%
1	BROCKTON	23	36.76	35.42	-1.34	-3.64%
1	TOGUS	28	45.34	46.55	1.21	2.67%
1	WEST HAVEN	23	46.51	48.77	2.26	4.87%
2	ALBANY	6	39.94	52.01	**12.07**	30.21%
2	BUFFALO	39	40.80	45.76	4.97	12.17%
2	CANANDAIGUA	31	42.37	45.72	3.35	7.92%
2	SYRACUSE	40	46.67	48.83	2.16	4.64%
3	BRONX					
3	BROOKLYN	76	44.97	47.22	2.25	5.00%
3	EAST ORANGE	36	43.65	41.57	-2.08	-4.76%
3	MONTROSE	40	29.83	26.53	-3.30	-11.05%
4	COATESVILLE	69	41.16	44.32	3.16	7.69%
4	PITTSBURGH	101	43.57	43.50	-0.07	-0.16%
5	PERRY POINT	67	38.24	38.27	0.03	0.08%
6	SALISBURY	31	40.53	28.31	-12.21	-30.14%
7	ATLANTA	48	43.68	40.49	-3.18	-7.28%
7	AUGUSTA	45	43.53	45.14	1.61	3.70%
7	TUSKEGEE	68	39.45	37.07	-2.38	-6.03%
8	GAINESVILLE	56	41.87	45.32	3.45	8.23%
8	MIAMI	51	45.71	44.59	-1.11	-2.43%
9	MOUNTAIN HOME	8	45.88	45.74	-0.13	-0.29%
10	CHILLICOTHE	33	47.62	51.78	4.15	8.72%
10	CINCINNATI	54	43.77	44.69	0.92	2.10%
10	CLEVELAND	51	42.68	46.82	4.14	9.70%
10	COLUMBUS	23	45.33	45.79	0.47	1.03%
10	DAYTON	38	51.93	56.66	4.73	9.11%
11	ANN ARBOR	41	43.48	47.04	3.56	8.19%
11	BATTLE CREEK	63	39.44	38.91	-0.53	-1.33%
11	DETROIT	66	44.23	44.56	0.33	0.74%
12	CHICAGO-WEST SIDE	74	42.14	41.67	-0.46	-1.10%
12	MADISON	36	47.42	47.31	-0.12	-0.25%
12	NORTH CHICAGO	92	46.52	49.34	2.81	6.05%
13	MINNEAPOLIS	51	44.35	47.67	3.32	7.49%
14	KNOXVILLE	51	42.33	46.77	4.44	10.49%
17	DALLAS	65	45.59	43.74	-1.85	-4.06%
17	WACO					
19	DENVER	61	44.01	44.70	0.69	1.57%
19	SOUTHERN COLORADO	56	45.08	42.77	-2.32	-5.14%
20	AMERICAN LAKE	47	44.95	49.34	4.39	9.77%
20	BOISE	35	46.70	51.89	5.19	11.11%
20	PORTLAND	64	39.49	36.52	-2.96	-7.51%
20	SEATTLE	39	43.37	45.00	1.62	3.74%
20	SPOKANE	15	47.65	58.08	**10.43**	21.88%
21	SAN FRANCISCO	31	44.97	44.09	-0.88	-1.96%
22	WEST LA	45	41.65	43.50	1.85	4.44%
	ALL SITES	2132	43.55	44.77	0.95	2.18%
	SITE AVERAGE	48.45	43.47	44.78	1.30	2.76%
	SITE STD. DEV.	22.66	3.62	6.02	3.78	9.00%

Change values are least squares means derived from analysis of covariance adjusted for site, time, baseline value, and eleven other baseline covariates.

Outlined values represent significant t-test differences, in the undesired direction, between LS means for the indicated site and the median site on this variable.

Bold/Underlined values represent positive outliers.

Source: Client Interviews

TABLE 2-23. QUALITY OF LIFE

Pre-Entry vs. Follow-up

VISN	SITE	1 Pre-Entry N	2 Pre-Entry Mean	3 Follow-up Mean (2+4)	4 Change at Follow-up	5 Percent Change (4/2)
1	BEDFORD	115	24.27	26.39	2.12	8.73%
1	BROCKTON	25	27.44	32.42	4.98	18.15%
1	TOGUS	30	27.26	29.35	2.09	7.68%
1	WEST HAVEN	30	25.08	29.96	4.88	19.44%
2	ALBANY	6	20.83	22.98	2.15	10.30%
2	BUFFALO	41	25.86	30.95	5.09	19.70%
2	CANANDAIGUA	56	27.00	30.79	3.79	14.03%
2	SYRACUSE	41	22.46	25.47	3.01	13.39%
3	BRONX					
3	BROOKLYN	79	24.38	25.78	1.40	5.72%
3	EAST ORANGE	35	25.57	26.76	1.18	4.63%
3	MONTROSE	72	25.09	26.18	1.09	4.34%
4	COATESVILLE	75	25.69	29.23	3.53	13.76%
4	PITTSBURGH	100	26.55	28.90	2.35	8.83%
5	PERRY POINT	93	27.20	30.13	2.93	10.79%
6	SALISBURY	40	27.90	30.42	2.51	9.00%
7	ATLANTA	51	26.17	28.24	2.07	7.90%
7	AUGUSTA	74	27.35	30.41	3.06	11.17%
7	TUSKEGEE	68	27.15	30.99	3.84	14.15%
8	GAINESVILLE	64	26.42	29.69	3.28	12.40%
8	MIAMI	50	23.78	29.27	**5.49**	23.10%
9	MOUNTAIN HOME	8	27.78	32.75	4.98	17.92%
10	CHILLICOTHE	62	26.95	30.87	3.92	14.54%
10	CINCINNATI	49	25.84	27.19	1.36	5.25%
10	CLEVELAND	57	24.62	27.30	2.67	10.85%
10	COLUMBUS	22	23.05	25.90	2.86	12.40%
10	DAYTON	39	25.81	30.04	4.23	16.41%
11	ANN ARBOR	49	24.98	28.13	3.15	12.62%
11	BATTLE CREEK	68	26.25	29.44	3.20	12.18%
11	DETROIT	70	26.81	29.10	2.28	8.51%
12	CHICAGO-WEST SIDE	74	24.92	28.88	3.96	15.90%
12	MADISON	39	26.66	27.40	0.74	2.78%
12	NORTH CHICAGO	140	25.21	27.27	2.07	8.20%
13	MINNEAPOLIS	63	25.68	26.91	1.22	4.76%
14	KNOXVILLE	56	26.28	29.71	3.43	13.06%
17	DALLAS	69	25.98	27.70	1.72	6.61%
17	WACO					
19	DENVER	68	26.39	28.93	2.54	9.64%
19	SOUTHERN COLORADO	89	27.39	30.18	2.79	10.20%
20	AMERICAN LAKE	51	24.48	29.03	4.54	18.56%
20	BOISE	35	26.45	30.89	4.44	16.78%
20	PORTLAND	50	22.93	26.28	3.35	14.59%
20	SEATTLE	39	23.80	25.79	1.99	8.36%
20	SPOKANE	15	25.29	27.07	1.77	7.02%
21	SAN FRANCISCO	35	25.30	28.63	3.32	13.13%
22	WEST LA	53	22.56	25.69	3.13	13.88%
	ALL SITES	2445	25.67	28.52	2.81	10.95%
	SITE AVERAGE	56	25.57	28.53	2.96	11.61%
	SITE STD. DEV.	27	1.58	2.07	1.19	4.64%

Change values are least squares means derived from analysis of covariance adjusted for site, time, baseline value, and eleven other baseline covariates.

Outlined values represent significant t-test differences, in the undesired direction, between LS means for the indicated site and the median site on this variable.

Bold/Underlined values represent positive outliers.

Source: Client Interviews

TABLE 2-23a. HOUSING INDEPENDENCE

Pre-Entry vs. Follow-up

VISN	SITE	1 Pre-Entry N	2 Pre-Entry Mean	3 Follow-up Mean (2+4)	4 Change at Follow-up	5 Percent Change (4/2)
1	BEDFORD	116	2.77	3.22	0.46	16.46%
1	BROCKTON	30	2.14	2.43	0.29	13.41%
1	TOGUS	29	2.87	3.11	0.24	8.48%
1	WEST HAVEN	29	2.42	2.94	0.52	21.35%
2	ALBANY	6	2.48	3.31	0.83	33.43%
2	BUFFALO	47	3.13	3.24	0.10	3.32%
2	CANANDAIGUA	58	2.70	3.07	0.37	13.74%
2	SYRACUSE	41	3.14	3.58	0.44	14.16%
3	BRONX					
3	BROOKLYN	79	3.53	4.08	0.55	15.64%
3	EAST ORANGE	37	2.82	3.25	0.43	15.08%
3	MONTROSE	75	1.70	2.15	0.44	26.08%
4	COATESVILLE	73	2.51	3.07	0.57	22.65%
4	PITTSBURGH	91	2.92	3.54	0.63	21.46%
5	PERRY POINT	97	2.24	2.52	0.28	12.31%
6	SALISBURY	40	2.07	2.84	0.77	37.06%
7	ATLANTA	54	3.40	3.92	0.52	15.20%
7	AUGUSTA	75	2.17	2.71	0.54	25.01%
7	TUSKEGEE	67	3.46	4.10	0.63	18.32%
8	GAINESVILLE	64	3.20	3.85	0.65	20.32%
9	MOUNTAIN HOME	8	2.71	3.31	0.59	21.91%
10	CHILLICOTHE	62	1.62	2.15	0.53	32.82%
10	CINCINNATI	54	3.49	3.93	0.44	12.64%
10	CLEVELAND	61	2.51	2.16	-0.36	-14.19%
10	COLUMBUS	22	3.41	3.91	0.50	14.70%
10	DAYTON	37	3.29	3.96	0.67	20.24%
11	ANN ARBOR	49	3.24	3.90	0.66	20.31%
11	BATTLE CREEK	69	2.73	3.19	0.46	16.99%
11	DETROIT	73	2.71	3.04	0.32	11.96%
12	CHICAGO-WEST SIDE	49	3.41	3.74	0.33	9.80%
12	MADISON	39	2.76	3.37	0.60	21.86%
12	NORTH CHICAGO	137	2.51	2.25	-0.26	-10.20%
13	MINNEAPOLIS	63	3.19	3.65	0.46	14.37%
14	KNOXVILLE	57	2.66	2.97	0.31	11.52%
17	DALLAS	69	3.24	3.85	0.61	18.82%
17	WACO					
19	DENVER	69	2.69	2.84	0.14	5.33%
19	SOUTHERN COLORADO	99	3.31	3.66	0.36	10.84%
20	AMERICAN LAKE	48	3.09	3.80	0.71	23.12%
20	BOISE	34	3.40	4.27	0.87	25.57%
20	PORTLAND	31	3.49	4.09	0.61	17.42%
20	SEATTLE	39	3.08	3.40	0.33	10.63%
20	SPOKANE	12	3.26	3.91	0.65	19.88%
21	SAN FRANCISCO	37	2.64	3.35	0.71	27.04%
22	WEST LA	49	2.78	3.23	0.45	16.17%
	ALL SITES	2375	2.84	3.22	0.43	15.05%
	SITE AVERAGE	55	2.86	3.32	0.46	16.55%
	SITE STD. DEV.	27	0.49	0.58	0.24	9.44%

Change values are least squares means derived from analysis of covariance adjusted for site, time, baseline value, and eleven other baseline covariates.
Outlined values represent significant t-test differences, in the undesired direction, between LS means for the indicated site and the median site on this variable.

Source: Client Interviews

TABLE 2-24. VA MENTAL HEALTH SERVICE SATISFACTION

Pre-Entry vs. Follow-up

VISN	SITE	1 Pre-Entry N	2 Pre-Entry Mean	3 Follow-up Mean (2+4)	4 Change at Follow-up	5 Percent Change (4/2)
1	BEDFORD	109	8.76	9.86	1.09	12.49%
1	BROCKTON	22	8.45	10.73	2.27	26.89%
1	TOGUS	27	8.70	9.81	1.10	12.67%
1	WEST HAVEN	23	7.87	10.03	2.16	27.47%
2	ALBANY	6	9.33	11.62	2.28	24.47%
2	BUFFALO	39	10.28	12.42	2.13	20.76%
2	CANANDAIGUA	50	9.34	10.60	1.26	13.52%
2	SYRACUSE	39	9.31	10.04	0.73	7.89%
3	BRONX					
3	BROOKLYN	65	8.54	10.04	1.50	17.59%
3	EAST ORANGE	37	7.65	8.97	1.32	17.29%
3	MONTROSE	62	8.02	9.46	1.45	18.05%
4	COATESVILLE	71	8.04	10.04	1.99	24.80%
4	PITTSBURGH	86	8.70	10.22	1.52	17.53%
5	PERRY POINT	79	8.65	9.79	1.14	13.24%
6	SALISBURY	32	8.63	10.86	2.24	25.92%
7	ATLANTA	49	8.63	10.11	1.47	17.08%
7	AUGUSTA	72	8.53	9.51	0.98	11.54%
7	TUSKEGEE	63	8.90	10.92	2.02	22.66%
8	GAINESVILLE	57	7.86	10.38	2.52	32.10%
9	MOUNTAIN HOME	8	7.75	8.85	1.10	14.15%
10	CHILLICOTHE	60	7.40	8.74	1.34	18.15%
10	CINCINNATI	51	10.51	11.75	1.24	11.82%
10	CLEVELAND	38	9.13	10.79	1.66	18.14%
10	COLUMBUS	22	9.45	11.38	1.92	20.34%
10	DAYTON	38	10.24	12.22	1.98	19.36%
11	ANN ARBOR	41	7.93	9.84	1.91	24.15%
11	BATTLE CREEK	62	7.74	9.31	1.57	20.23%
11	DETROIT	66	9.91	11.63	1.72	17.38%
12	CHICAGO-WEST SIDE	46	9.24	10.03	0.79	8.53%
12	MADISON	37	8.78	9.62	0.84	9.52%
12	NORTH CHICAGO	124	8.94	10.10	1.16	12.94%
13	MINNEAPOLIS	60	7.85	9.82	1.97	25.07%
14	KNOXVILLE	55	9.18	10.26	1.08	11.74%
17	DALLAS	66	8.35	10.03	1.68	20.08%
17	WACO					
19	DENVER	64	8.56	10.26	1.70	19.85%
19	SOUTHERN COLORADO	82	10.12	12.32	2.20	21.70%
20	AMERICAN LAKE	43	8.37	9.82	1.45	17.28%
20	BOISE	33	8.64	10.68	2.04	23.65%
20	PORTLAND	22	9.23	10.63	1.40	15.15%
20	SEATTLE	35	8.40	10.87	2.47	29.45%
20	SPOKANE	15	7.47	10.45	2.98	39.95%
21	SAN FRANCISCO	32	9.16	10.92	1.76	19.25%
22	WEST LA	42	8.36	9.82	1.47	17.54%
	ALL SITES	2130	8.76	10.11	1.54	17.63%
	SITE AVERAGE	50	8.72	10.36	1.64	19.02%
	SITE STD. DEV.	25	0.77	0.88	0.51	6.48%

Change values are least squares means derived from analysis of covariance adjusted for site, time, baseline value, and eleven other baseline covariates.

Outlined values represent significant t-test differences, in the undesired direction, between LS means for the indicated site and the median site on this variable.

Bold/Underlined values represent positive outliers.

Source: Client Interviews

TABLE 2-25. SATISFACTION WITH VA MHICM SERVICES

Pre-Entry vs. Follow-up

VISN	SITE	1 Pre-Entry N	2 Pre-Entry Mean	3 Follow-up Mean (2+4)	4 Change at Follow-up	5 Percent Change (4/2)
1	BEDFORD	114	2.97	3.03	0.05	1.77%
1	BROCKTON	23	3.09	3.97	0.89	28.75%
1	TOGUS	30	3.17	3.74	0.57	18.09%
1	WEST HAVEN	26	2.23	2.57	0.33	15.01%
2	ALBANY	6	2.83	3.65	0.82	28.90%
2	BUFFALO	40	3.45	3.83	0.38	11.03%
2	CANANDAIGUA	55	3.15	3.64	0.49	15.71%
2	SYRACUSE	39	3.03	2.88	-0.14	-4.70%
3	BRONX					
3	BROOKLYN	66	2.82	3.16	0.34	12.09%
3	EAST ORANGE	37	2.70	2.74	0.04	1.43%
3	MONTROSE	56	3.09	3.36	0.27	8.79%
4	COATESVILLE	76	3.04	3.47	0.43	14.01%
4	PITTSBURGH	87	2.91	3.41	0.50	17.15%
5	PERRY POINT	80	3.04	3.26	0.22	7.17%
6	SALISBURY	33	3.18	3.90	0.72	22.71%
7	ATLANTA	50	2.90	3.01	0.11	3.82%
7	AUGUSTA	69	3.38	3.58	0.20	5.96%
7	TUSKEGEE	66	3.17	3.78	0.62	19.45%
8	GAINESVILLE	57	2.88	2.75	-0.12	-4.33%
8	MIAMI	47	3.34	3.65	0.31	9.37%
9	MOUNTAIN HOME	8	3.38	4.10	0.72	21.47%
10	CHILLICOTHE	60	2.97	3.12	0.16	5.24%
10	CINCINNATI	51	3.39	3.79	0.40	11.81%
10	CLEVELAND	46	2.98	3.04	0.06	2.00%
10	COLUMBUS	23	2.70	2.92	0.22	8.26%
10	DAYTON	38	3.53	4.18	0.65	18.45%
11	ANN ARBOR	44	2.75	3.35	0.60	21.98%
11	BATTLE CREEK	64	3.16	3.67	0.51	16.32%
11	DETROIT	64	2.97	3.45	0.48	16.12%
12	CHICAGO-WEST SIDE	74	3.39	3.68	0.29	8.50%
12	MADISON	38	3.18	3.17	-0.02	-0.56%
12	NORTH CHICAGO	135	3.15	3.29	0.14	4.47%
13	MINNEAPOLIS	62	2.94	3.20	0.27	9.15%
14	KNOXVILLE	56	2.66	2.54	-0.12	-4.47%
17	DALLAS	66	3.18	3.52	0.34	10.69%
17	WACO					
19	DENVER	63	3.03	3.26	0.23	7.44%
19	SOUTHERN COLORADO	93	3.26	3.62	0.37	11.23%
20	AMERICAN LAKE	46	2.80	2.94	0.14	4.97%
20	BOISE	35	3.29	3.68	0.40	12.12%
20	PORTLAND	59	3.10	3.24	0.14	4.51%
20	SEATTLE	37	3.14	3.90	0.77	24.52%
20	SPOKANE	14	2.86	3.32	0.47	16.36%
21	SAN FRANCISCO	33	3.27	3.96	0.69	21.06%
22	WEST LA	44	2.86	3.18	0.31	10.95%
	ALL SITES	2310	3.07	3.69	0.62	20.09%
	SITE AVERAGE	53	3.05	3.40	0.35	11.44%
	SITE STD. DEV.	25	0.25	0.41	0.26	8.40%

Change values are least squares means derived from analysis of covariance adjusted for site, time, baseline value, and eleven other baseline covariates.

Outlined values represent significant t-test differences, in the undesired direction, between LS means for the indicated site and the median site on this variable.

Bold/Underlined values represent positive outliers.

Source: Client Interviews

TABLE 2-26. MHICM UNIT COSTS (Based on FY 2000 Expenditures)

VISN	SITE	FY 00 TOTAL EXPENDIT.	TOTAL VETS	COST PER VETERAN	FY 00 P/S EXPEND.	FY 00 FILLED FTE	COST PER FTE	ADJUSTED TOTAL VISITS PER VET/YR	TOTAL VISITS PER SITE/YR	COST PER VISIT
1	BEDFORD	$735,433	131	$5,614	$720,914.00	9.75	$73,940	159.41	20883	$35
1	BROCKTON	$582,077	81	$7,186	$541,017.00	9.00	$60,113	164.28	13307	$44
1	TOGUS	$235,816	30	$7,861	$226,387.00	3.25	$69,658	62.94	1888	$125
1	WEST HAVEN	$442,343	71	$6,230	$411,534.65	6.03	$68,248	100.35	7125	$62
2	ALBANY*	$314,164	44	$7,140	$312,179.00	4.50	$69,373	1.98	87	
2	BUFFALO	$308,710	80	$3,859	$299,543.00	5.30	$56,518	40.60	3248	$95
2	CANANDAIGUA	$496,629	129	$3,850	$450,962.50	9.00	$50,107	71.96	9283	$53
2	SYRACUSE	$204,784	66	$3,103	$204,684.06	4.00	$51,171	53.76	3548	$58
3	BRONX~									
3	BROOKLYN	$350,353	82	$4,273	$337,003.13	6.00	$56,167	42.44	3480	$101
3	EAST ORANGE	$241,752	37	$6,534	$230,259.00	3.15	$73,098	74.51	2757	$88
3	MONTROSE	$479,309	129	$3,716	$461,860.00	6.50	$71,055	41.50	5354	$90
4	COATESVILLE	$213,430	78	$2,736	$211,430.00	3.80	$55,639	50.73	3957	$54
4	PITTSBURGH	$420,531	107	$3,930	$413,177.00	7.15	$57,787	62.95	6736	$62
5	PERRY POINT	$435,714	108	$4,034	$419,178.00	6.50	$64,489	59.59	6435	$68
6	SALISBURY	$107,939	44	$2,453	$70,694.00	5.63	$12,557	9.02	397	$272
7	ATLANTA	$253,445	56	$4,526	$239,295.00	5.20	$46,018	132.82	7438	$34
7	AUGUSTA	$324,421	75	$4,326	$319,176.92	6.00	$53,196	196.10	14707	$22
7	TUSKEGEE	$300,169	74	$4,056	$294,156.94	2.00	$147,078	38.31	2835	$106
8	GAINESVILLE	$535,513	66	$8,114	$496,048.00	6.50	$76,315	44.66	2947	$182
8	MIAMI	$355,823	53	$6,714	$323,322.60	4.25	$76,076	93.99	4982	$71
9	MOUNTAIN HOME	$221,540	8	$27,693	$218,101.00	2.30	$94,827	71.38	571	$388
10	CHILLICOTHE	$359,579	62	$5,800	$346,084.06	6.00	$57,681	114.43	7095	$51
10	CINCINNATI	$193,455	55	$3,517	$180,755.00	4.00	$45,189	58.80	3234	$60
10	CLEVELAND	$617,778	68	$9,085	$588,672.00	6.50	$90,565	47.32	3218	$192
10	COLUMBUS	$187,581	23	$8,156	$176,708.00	3.00	$58,903	71.15	1637	$115
10	DAYTON	$255,429	39	$6,549	$223,399.45	4.00	$55,850	29.80	1162	$220
11	ANN ARBOR	$335,364	50	$6,707	$288,263.73	5.20	$55,435	97.16	4858	$69
11	BATTLE CREEK	$339,327	72	$4,713	$323,985.00	6.00	$53,998	64.01	4609	$74
11	DETROIT	$304,967	74	$4,121	$299,467.00	8.80	$34,030	61.62	4560	$67
12	CHICAGO-WEST SIDE	$260,031	80	$3,250	$254,280.86	5.25	$48,434	65.77	5261	$49
12	MADISON	$247,639	39	$6,350	$221,552.00	2.70	$82,056	270.20	10538	$23
12	NORTH CHICAGO	$659,390	144	$4,579	$635,252.00	9.00	$70,584	166.18	23931	$28
13	MINNEAPOLIS	$331,333	66	$5,020	$318,543.00	5.20	$61,258	63.25	4174	$79
14	KNOXVILLE	$450,981	63	$7,158	$436,195.14	7.70	$56,649	69.13	4355	$104
17	DALLAS	$353,135	70	$5,045	$338,117.00	5.50	$61,476	63.11	4418	$80
17	WACO~									
19	DENVER	$333,389	71	$4,696	$327,593.00	6.50	$50,399	47.83	3396	$98
19	SOUTHERN COLORADC	$408,516	111	$3,680	$256,395.50	7.60	$33,736	75.63	8395	$49
20	AMERICAN LAKE	$328,896	52	$6,325	$324,252.00	5.65	$57,390	85.37	4439	$74
20	BOISE	$290,695	35	$8,306	$287,695.00	5.00	$57,539	94.55	3309	$88
20	PORTLAND	$431,854	68	$6,351	$409,884.00	6.10	$67,194	78.43	5333	$81
20	SEATTLE	$303,041	42	$7,215	$298,397.15	5.30	$56,301	119.90	5036	$60
20	SPOKANE	$155,114	15	$10,341	$143,364.00	2.50	$57,346	91.78	1377	$113
21	SAN FRANCISCO	$270,417	39	$6,934	$265,228.86	2.20	$120,559	51.75	2018	$134
22	WEST LA	$352,004	53	$6,642	$327,776.00	5.00	$65,555	25.16	1333	$264
	ALL SITES	$15,329,809	2940	$5,214	$14,472,783	240.51	$60,175	83.16	244487	$63
	SITE AVERAGE	$348,404.74	66.82	$6,102	$328,927	5.47	$63,217	77.01	5447	$97
	SITE STD. DEV.	$132,337.62	30.41	$3,757	$128,134	1.93	$21,086	49.89	4811	$73

* Incomplete or unavailable data for this site

~ Did not submit FY00 Annual Progress Report

Excludes veterans treated by MHICM staff but receiving non-MHICM services.

Source: MHICM Local Progress Reports FY 2000

TABLE 2-27. SITE PERFORMANCE ON MHICM CRITICAL MONITORS

VISN	SITE	MONITORING DOMAIN				Total Team Outliers	Total Applicable Monitors	% Outliers/ Applicable Monitors
		STRUCTURE	CLIENT	PROCESS	OUTCOME			
1	BEDFORD	0	1	0	0	1	17	5.88%
1	BROCKTON	2	0	0	0	2	17	11.76%
1	TOGUS	1	0	3	0	4	17	23.53%
1	WEST HAVEN	1	0	0	1	2	17	11.76%
2	ALBANY	2	0	1	0	3	17	17.65%
2	BUFFALO	1	1	2	0	4	16	25.00%
2	CANANDAIGUA	0	0	0	0	0	17	0.00%
2	SYRACUSE	2	1	1	1	5	17	29.41%
3	BRONX~	2	0	2	0	4	9	44.44%
3	BROOKLYN	1	0	2	0	3	17	17.65%
3	EAST ORANGE	2	0	0	1	3	17	17.65%
3	MONTROSE	1	0	1	1	3	17	17.65%
4	COATESVILLE	3	0	1	0	4	17	23.53%
4	PITTSBURGH	1	0	1	0	2	17	11.76%
5	PERRY POINT	1	0	0	1	2	17	11.76%
6	SALISBURY	1	0	3	0	4	17	23.53%
7	ATLANTA	1	0	2	0	3	17	17.65%
7	AUGUSTA	3	0	0	0	3	17	17.65%
7	TUSKEGEE	3	1	2	0	6	17	35.29%
8	GAINESVILLE	1	0	1	0	2	17	11.76%
8	MIAMI	3	0	0	1	4	16	25.00%
9	MOUNTAIN HOME	2	1	1	0	4	17	23.53%
10	CHILLICOTHE	1	0	2	0	3	17	17.65%
10	CINCINNATI	1	0	2	1	4	17	23.53%
10	CLEVELAND	0	0	3	0	3	17	17.65%
10	COLUMBUS	1	0	0	1	2	17	11.76%
10	DAYTON	2	1	1	1	5	17	29.41%
11	ANN ARBOR	1	0	0	0	1	17	5.88%
11	BATTLE CREEK	1	1	1	0	3	17	17.65%
11	DETROIT	0	0	0	0	0	17	0.00%
12	CHICAGO-WEST SIDE	3	0	3	0	6	16	37.50%
12	MADISON	2	0	0	3	5	17	29.41%
12	NORTH CHICAGO	2	1	0	0	3	17	17.65%
13	MINNEAPOLIS	2	0	0	2	4	17	23.53%
14	KNOXVILLE	1	0	0	1	2	16	12.50%
17	DALLAS	0	0	1	0	1	17	5.88%
17	WACO~	2	0	1	0	3	7	42.86%
19	DENVER	0	0	3	0	3	17	17.65%
19	SOUTHERN COLORADO	0	1	1	0	2	15	13.33%
20	AMERICAN LAKE	1	0	1	1	3	17	17.65%
20	BOISE	2	1	0	1	4	17	23.53%
20	PORTLAND	1	0	1	0	2	16	12.50%
20	SEATTLE	1	0	0	1	2	17	11.76%
20	SPOKANE	2	1	3	1	7	17	41.18%
21	SAN FRANCISCO	3	0	4	0	7	17	41.18%
22	WEST LA	2	0	2	1	5	17	29.41%
	OUTLIER SITES (N)	39	11	29	17	44	757	20.11%
	OUTLIER SITES (%)	84.8%	23.9%	63.0%	37.0%	95.7%		
	OUTLIER TOTAL	65	11	52	20	192	757	25.36%
	TOTAL MONITORS	224	138	222	173	757		
	% OUTLIERS/TOTAL	29.02%	7.97%	23.42%	11.56%	25.36%		
	OUTLIER MEAN	1.41	0.24	1.13	0.43	3.22	16.46	

Total number of critical monitors for which sites is an outlier in the undesired direction.
~Insufficient monitoring data submitted for this site.

TABLE 2-28. OUTLIERS FOR TEAM STRUCTURE MONITORS
National Performance Monitoring Report, FY 2000

VISN	SITE	1 FTE UNFILLED MORE THAN 6 MONTHS	2 UNASSIGNED MEDICAL SUPPORT MD and/or RN	3 CASELOAD SIZE: MEAN RATIO OF CLIENTS PER CLINICAL FTEE	4 TEAM SIZE # FULL-TIME CLINICAL STAFF	5 Total Team Structure Outliers	6 # Applicable Team Structure Monitors	7 % Outliers/ Applicable Structure Monitors
	Outlier Direction	(Y)	(N)	(LT 7 or GT 15)	(4.0 + FTEE)	(1+2+3+4)	(1+2+3+4)	(5/6)
1	BEDFORD					0	5	0%
1	BROCKTON	Y	N			2	5	40%
1	TOGUS				2.50	1	5	20%
1	WEST HAVEN	Y				1	5	20%
2	ALBANY	Y			3.00	2	5	40%
2	BUFFALO	Y				1	5	20%
2	CANANDAIGUA					0	5	0%
2	SYRACUSE	Y			3.50	2	5	40%
3	BRONX			20.40	2.50	2	2	100%
3	BROOKLYN		N			1	5	20%
3	EAST ORANGE	Y			2.50	2	5	40%
3	MONTROSE			19.09		1	5	20%
4	COATESVILLE		N	17.89	3.80	3	5	60%
4	PITTSBURGH			18.00		1	5	20%
5	PERRY POINT			17.27		1	5	20%
6	SALISBURY	Y				1	5	20%
7	ATLANTA				3.50	1	5	20%
7	AUGUSTA	Y	N	15.33		3	5	60%
7	TUSKEGEE		N	32.00	2.00	3	5	60%
8	GAINESVILLE			16.25		1	5	20%
8	MIAMI	Y		19.20	2.50	3	5	60%
9	MOUNTAIN HOME			4.00	1.50	2	5	40%
10	CHILLICOTHE	Y				1	5	20%
10	CINCINNATI		N			1	5	20%
10	CLEVELAND					0	5	0%
10	COLUMBUS				2.50	1	5	20%
10	DAYTON	Y			3.00	2	5	40%
11	ANN ARBOR				3.50	1	5	20%
11	BATTLE CREEK	Y				1	5	20%
11	DETROIT					0	5	0%
12	CHICAGO-WEST SIDE	Y		16.57	3.50	3	5	60%
12	MADISON			18.50	2.00	2	5	40%
12	NORTH CHICAGO	Y		16.88		2	5	40%
13	MINNEAPOLIS			17.14	3.50	2	5	40%
14	KNOXVILLE	Y				1	5	20%
17	DALLAS					0	5	0%
17	WACO			17.20	2.50	2	2	100%
19	DENVER					0	5	0%
19	SOUTHERN COLORADO					0	5	0%
20	AMERICAN LAKE	Y				1	5	20%
20	BOISE		N		2.50	2	5	40%
20	PORTLAND	Y				1	5	20%
20	SEATTLE				3.60	1	5	20%
20	SPOKANE			6.29	1.75	2	5	40%
21	SAN FRANCISCO	Y		22.00	1.50	3	5	60%
22	WEST LA	Y			3.50	2	5	40%
	OUTLIER SITES (N)	22	5	2	17	22	39	224	31%
	OUTLIER SITES (%)	47.8%	11.4%	4.5%	36.9%	47.8%	84.8%	100%	
	OUTLIER TOTAL						65	224	29%

Outlier: Significant difference ($p<0.05$) from median site in undesired direction, after adjusting for client differences and time in program.

[Team structure monitors are presented in Report Tables 2-5 (p.35) and 2-6 (36).]

TABLE 2-29. OUTLIERS FOR CLIENT CHARACTERISTICS MONITORS
National Performance Monitoring Report, FY 2000

VISN	Outlier Direction	1 PERCENT OF CLIENTS WITH GTE 30 DAYS HOSP. YR PRE (LT 50%)	2 PERCENT OF CLIENTS WITH PSYCHOTIC DX AT ENTRY (LT 50%)	3 MEAN GAF AT ENTRY EXCEEDS 50 (GT 50)	4 Total Client Outliers (1+2+3)	5 # Applicable Client Characteristic Monitors (1+2+3)	6 % Outliers/ Applicable Client Monitors (4/5)
1	BEDFORD		40.8		1	3	33%
1	BROCKTON				0	3	0%
1	TOGUS				0	3	0%
1	WEST HAVEN				0	3	0%
2	ALBANY				0	3	0%
2	BUFFALO	28.3			1	3	33%
2	CANANDAIGUA				0	3	0%
2	SYRACUSE		48.8		1	3	33%
3	BRONX				0	3	0%
3	BROOKLYN				0	3	0%
3	EAST ORANGE				0	3	0%
3	MONTROSE				0	3	0%
4	COATESVILLE				0	3	0%
4	PITTSBURGH				0	3	0%
5	PERRY POINT				0	3	0%
6	SALISBURY				0	3	0%
7	ATLANTA				0	3	0%
7	AUGUSTA				0	3	0%
7	TUSKEGEE			50.3	1	3	33%
8	GAINESVILLE				0	3	0%
8	MIAMI				0	3	0%
9	MOUNTAIN HOME			59.6	1	3	33%
10	CHILLICOTHE				0	3	0%
10	CINCINNATI				0	3	0%
10	CLEVELAND				0	3	0%
10	COLUMBUS				0	3	0%
10	DAYTON			55.2	1	3	33%
11	ANN ARBOR				0	3	0%
11	BATTLE CREEK			50.2	1	3	33%
11	DETROIT				0	3	0%
12	CHICAGO-WEST SIDE				0	3	0%
12	MADISON				0	3	0%
12	NORTH CHICAGO		46.8		1	3	33%
13	MINNEAPOLIS				0	3	0%
14	KNOXVILLE				0	3	0%
17	DALLAS				0	3	0%
17	WACO				0	3	0%
19	DENVER				0	3	0%
19	SOUTHERN COLORADO	11.1			1	3	33%
20	AMERICAN LAKE				0	3	0%
20	BOISE	37.1			1	3	33%
20	PORTLAND				0	3	0%
20	SEATTLE				0	3	0%
20	SPOKANE	40.0			1	3	33%
21	SAN FRANCISCO				0	3	0%
22	WEST LA				0	3	0%
	OUTLIER SITES (N)	4	3	4	11	138	8%
	OUTLIER SITES (%)	8.7%	6.5%	8.7%	23.9%	100%	
	OUTLIER TOTAL				11	138	8%

[Client monitors are presented in Report Tables 2-10 (p.40) and 2-11 (41).]

TABLE 2-30. OUTLIERS FOR CLINICAL PROCESS MONITORS
National Performance Monitoring Report, FY 2000

VISN	SITE	1 TENURE % CLIENTS DISCHARGED	2 INTENSITY % CLIENTS SEEN FOR GTE 1 HOUR PER WEEK	3 LOCATION % CLIENTS SEEN 60% OR MORE IN COMMUNITY	4 FREQUENCY # ADJUSTED FACE-FACE CONTACTS/WK/ VETERAN	5 TEAM PROVIDES PSYCHIATRIC REHABILIT'N SERVICES	6 Total Clinical Process Outliers	7 # Applicable Clinical Process Monitors	8 % Outliers/ Applicable Clinical Process Monitors
	Outlier Direction	(> 20%)	(< 1 HR/WK)	(< 50%)	(< 1/WK)	(< 25% VETS)	(1+2+3+4+5)	(1+2+3+4+5)	(6/7)
1	BEDFORD						0	5	0%
1	BROCKTON						0	5	0%
1	TOGUS		40.0		0.91	4.2	3	5	60%
1	WEST HAVEN						0	5	0%
2	ALBANY				0.04		1	5	20%
2	BUFFALO	22.5%			0.69		2	4	50%
2	CANANDAIGUA						0	5	0%
2	SYRACUSE				0.84		1	5	20%
3	BRONX				0.24	12.5	2	3	67%
3	BROOKLYN				0.42	15.9	2	5	40%
3	EAST ORANGE						0	5	0%
3	MONTROSE				0.78		1	5	20%
4	COATESVILLE				0.80		1	5	20%
4	PITTSBURGH		34.6				1	5	20%
5	PERRY POINT						0	5	0%
6	SALISBURY		47.7		0.12	4.3	3	5	60%
7	ATLANTA		42.9			19.5	2	5	40%
7	AUGUSTA						0	5	0%
7	TUSKEGEE				0.73	17.3	2	5	40%
8	GAINESVILLE				0.85		1	5	20%
8	MIAMI						0	5	0%
9	MOUNTAIN HOME	25.0%					1	5	20%
10	CHILLICOTHE		40.3			11.5	2	5	40%
10	CINCINNATI	21.8%			0.92		2	5	40%
10	CLEVELAND	33.8%			0.91	11.6	3	5	60%
10	COLUMBUS						0	5	0%
10	DAYTON				0.57		1	5	20%
11	ANN ARBOR						0	5	0%
11	BATTLE CREEK					23.8	1	5	20%
11	DETROIT						0	5	0%
12	CHICAGO-WEST SIDE	26.3%	42.5			19.1	3	5	60%
12	MADISON						0	5	0%
12	NORTH CHICAGO						0	5	0%
13	MINNEAPOLIS						0	5	0%
14	KNOXVILLE						0	5	0%
17	DALLAS					23.1	1	5	20%
17	WACO				0.86		1	1	100%
19	DENVER		47.9		0.92	15.1	3	5	60%
19	SOUTHERN COLORADO				0.86		1	4	25%
20	AMERICAN LAKE					7.3	1	5	20%
20	BOISE						0	5	0%
20	PORTLAND					3.6	1	5	20%
20	SEATTLE						0	5	0%
20	SPOKANE	26.7%		40.0	0.84		3	5	60%
21	SAN FRANCISCO	23.1%	25.6		0.98	6.5	4	5	80%
22	WEST LA				0.48	17.5	2	5	40%
	OUTLIER SITES (N)	7	9	1	20	16	29	222	25%
	OUTLIER SITES (%)	15.2%	19.6%	2.2%	43.5%	34.8%	63.0%	100%	
	OUTLIER TOTAL						52	222	23%

[Clinical process monitors are presented in Report Tables 2-12 (p.42), 2-13 (43), 2-14 (43), and 2-15 (45).]

TABLE 2-31. OUTLIERS FOR CLIENT OUTCOME MONITORS
National Performance Monitoring Report, FY 2000

VISN	SITE	1 365 Days % Change MH Days (Post-Pre)	2 Reported Symptoms % Change (BSI)	3 Observed Symptoms % Change (BPRS)	4 Quality of Life % Change (QOL)	5 Total Client Outcome Outliers	6 # Applicable Client Outcome Monitors	7 % Outliers/ Applicable Outcome Monitors
	Outlier Direction	(LOW)	(HIGH)	(HIGH)	(LOW)	(1+2+3+4)	(1+2+3+4)	(5/6)
1	BEDFORD					0	4	0%
1	BROCKTON					0	4	0%
1	TOGUS					0	4	0%
1	WEST HAVEN			7.96%		1	4	25%
2	ALBANY					0	4	0%
2	BUFFALO					0	4	0%
2	CANANDAIGUA					0	4	0%
2	SYRACUSE			11.00%		1	4	25%
3	BRONX					0	1	0%
3	BROOKLYN					0	4	0%
3	EAST ORANGE	-45.5%				1	4	25%
3	MONTROSE			14.95%		1	4	25%
4	COATESVILLE					0	4	0%
4	PITTSBURGH					0	4	0%
5	PERRY POINT			2.28%		1	4	25%
6	SALISBURY					0	4	0%
7	ATLANTA					0	4	0%
7	AUGUSTA					0	4	0%
7	TUSKEGEE					0	4	0%
8	GAINESVILLE					0	4	0%
8	MIAMI	-37.5%				1	3	33%
9	MOUNTAIN HOME					0	4	0%
10	CHILLICOTHE					0	4	0%
10	CINCINNATI	-41.8%				1	4	25%
10	CLEVELAND					0	4	0%
10	COLUMBUS	-27.2%				1	4	25%
10	DAYTON	-27.1%				1	4	25%
11	ANN ARBOR					0	4	0%
11	BATTLE CREEK					0	4	0%
11	DETROIT					0	4	0%
12	CHICAGO-WEST SIDE					0	3	0%
12	MADISON		2.55%	2.03%	2.78%	3	4	75%
12	NORTH CHICAGO					0	4	0%
13	MINNEAPOLIS		-0.20%	34.67%		2	4	50%
14	KNOXVILLE			5.97%		1	3	33%
17	DALLAS					0	4	0%
17	WACO					0	1	0%
19	DENVER					0	4	0%
19	FORT LYON					0	3	0%
20	AMERICAN LAKE			2.44%		1	4	25%
20	BOISE	-41.7%				1	4	25%
20	PORTLAND					0	3	0%
20	SEATTLE			7.67%		1	4	25%
20	SPOKANE	-27.0%				1	4	25%
21	SAN FRANCISCO					0	4	0%
22	WEST LA			16.88%		1	4	25%
	OUTLIER SITES (N)	7	2	10	1	17	173	11%
	OUTLIER SITES (%)	15.9%	4.5%	22.7%	2.3%	37.0%	100%	
	OUTLIER TOTAL					20	173	12%

[Client outcome monitors are presented in Report Tables 2-18a (p.49), 2-19 (52), 2-20 (53) and 2-23 (56).]
[Note: There were no negative outliers for the IADL monitor. GAF and Satisfaction outcome monitors were excluded.]

TABLE 2-32. OUTLIERS FOR MINIMUM STANDARDS
National MHICM Performance Monitoring, FY 2000

VISN	SITE	1 % CLIENTS W/ PSYCHOTIC DIAGNOSIS AT ENTRY	2 % CLIENTS WITH 30 MH HOSPITAL DAYS PRIOR YR	3 FREQUENCY # ADJUSTED FACE-FACE CONTACTS/WK/ VETERAN	4 MEAN CASELOAD SIZE PER CLINICAL FTEE	5 LOCATION % CLIENTS SEEN IN COMMUNITY SETTINGS	6 TEAM PROVIDES PSYCHIATRIC REHABILIT'N SERVICES	7 PROGRAM TENURE % CLIENTS DISCHARGED	8 TEAM SIZE # FULL-TIME CLINICAL STAFF	9 Total Minimum Program Standards Outliers	10 % Minimum Program Standards Outliers	11 % Minimum Program Standards Outliers	12 Change Minimum Program Standards Outliers
	THRESHOLD	(> 50%)	(> 50%)	(> 1.0/wk)	(7:1 to 15:1)	(> 50%)	(> 25% VETS)	(< 20%)	(4.0 + FTEE)	(Col. 1..8)	(Col.9/8)	FY 1999	FY00-FY99
1	BEDFORD	40.8								1	12.5%	25.0%	-12.5%
1	BROCKTON									0	0.0%	0.0%	0.0%
1	TOGUS			0.91			4.2		2.50	3	37.5%	25.0%	12.5%
1	WEST HAVEN									0	0.0%	0.0%	0.0%
2	ALBANY			0.04					3.00	2	25.0%	50.0%	-25.0%
2	BUFFALO		28.3	0.69				22.5%		3	37.5%	25.0%	12.5%
2	CANANDAIGUA									0	0.0%	0.0%	0.0%
2	SYRACUSE	48.8		0.84					3.50	3	37.5%	0.0%	37.5%
3	BRONX			0.24	20.40		12.5		2.50	4	50.0%	62.5%	-12.5%
3	BROOKLYN			0.42			15.9			2	25.0%	37.5%	-12.5%
3	EAST ORANGE								2.50	1	12.5%	25.0%	-12.5%
3	MONTROSE			0.78	19.09					2	25.0%	25.0%	0.0%
4	COATESVILLE			0.80	17.89				3.80	3	37.5%	25.0%	12.5%
4	PITTSBURGH				18.00					1	12.5%	12.5%	0.0%
5	PERRY POINT				17.27					1	12.5%	12.5%	0.0%
6	SALISBURY			0.12			4.3			2	25.0%	25.0%	0.0%
7	ATLANTA						19.5		3.50	2	25.0%	37.5%	-12.5%
7	AUGUSTA				15.33					1	12.5%	12.5%	0.0%
7	TUSKEGEE			0.73	32.00		17.3		2.00	4	50.0%	37.5%	12.5%
8	GAINESVILLE			0.85	16.25					2	25.0%	0.0%	25.0%
8	MIAMI				19.20				2.50	2	25.0%	0.0%	25.0%
9	MOUNTAIN HOME				4.00			25.0%	1.50	3	37.5%	37.5%	0.0%
10	CHILLICOTHE						11.5			1	12.5%	12.5%	0.0%
10	CINCINNATI			0.92				21.8%		2	25.0%	50.0%	-25.0%
10	CLEVELAND			0.91			11.6	33.8%		3	37.5%	50.0%	-12.5%
10	COLUMBUS								2.50	1	12.5%	25.0%	-12.5%
10	DAYTON			0.57					3.00	2	25.0%	12.5%	12.5%
11	ANN ARBOR								3.50	1	12.5%	0.0%	12.5%
11	BATTLE CREEK						23.8			1	12.5%	12.5%	0.0%
11	DETROIT									0	0.0%	0.0%	0.0%
12	CHICAGO-WEST SIDE				16.57		19.1	26.3%	3.50	4	50.0%	12.5%	37.5%
12	MADISON				18.50				2.00	2	25.0%	25.0%	0.0%
12	NORTH CHICAGO	46.8			16.88					2	25.0%	12.5%	12.5%
13	MINNEAPOLIS				17.14				3.50	2	25.0%	12.5%	12.5%
14	KNOXVILLE									0	0.0%		0.0%
17	DALLAS						23.1			1	12.5%	12.5%	0.0%
17	WACO			0.86	17.20				2.50	3	37.5%	25.0%	12.5%
19	DENVER			0.92			15.1			2	25.0%	12.5%	12.5%
20	SOUTHERN COLORADO		11.1	0.86						2	25.0%		25.0%
20	AMERICAN LAKE						7.3			1	12.5%	25.0%	-12.5%
20	BOISE		37.1						2.50	2	25.0%	25.0%	0.0%
20	PORTLAND						3.6			1	12.5%	12.5%	0.0%
20	SEATTLE								3.60	1	12.5%	12.5%	0.0%
20	SPOKANE		40.0	0.84	6.29	40.0		26.7%	1.75	6	75.0%	50.0%	25.0%
21	SAN FRANCISCO			0.98	22.00		6.5	23.1%	1.50	5	62.5%	37.5%	25.0%
22	WEST LA			0.48			17.5		3.50	3	37.5%	12.5%	-12.5%
	OUTLIER SITES (N)	3	4	20	17	1	16	7	22	41	24.5%	21.0%	3.4%
	OUTLIER SITES (%)	6.5%	8.7%	43.5%	37.0%	2.2%	34.8%	15.2%	47.8%	89.1%			
	OUTLIER TOTAL									90			

Minimum Program Standards are identified in the MHICM Directive and derived from FY 2000 monitors.
Outlined "outlier" values fall beneath threshold levels for the minimum program standard.

Table 2-33. SITE OUTLIER REVIEW SUMMARY

VISN	SITE	Site # of Outliers 2000 Total #	Reason A Legitimate differences not conflict with national goals # of A's	Reason B Local Policies may conflict with national goals # of B's	Reason C Implementation problems: Correctve action taken # of C's	Reason D Implementation problems: Corrective action planned # of D's	Reason E Implementation problems: No corrective action planned # of E's	Sum of Responses Reason A-E Total
1	BEDFORD	1	1	0	0	0	0	1
1	BROCKTON	2	1	1	0	0	0	2
1	TOGUS	4	2	0	0	2	0	4
1	WEST HAVEN	2	1	1	0	0	0	2
2	ALBANY	3	0	0	2	0	0	2
2	BUFFALO	5	1	1	2	1	0	5
2	CANANDAIGUA+	0						
2	SYRACUSE	3	2	0	1	0	0	3
3	BRONX*	4						0
3	BROOKLYN	5	2	0	2	0	1	5
3	EAST ORANGE	3	0	0	1	0	0	1
3	MONTROSE	3	0	1	1	0	1	3
4	COATESVILLE*	4						0
4	PITTSBURGH	3	2	0	1	0	0	3
5	PERRYPOINT	2	1	1	0	0	0	2
6	SALISBURY	5	0	0	4	1	0	5
7	ATLANTA	4	0	1	2	1	0	4
7	AUGUSTA	3	1	2	0	0	0	3
7	TUSKEGEE	3	0	0	2	1	0	3
8	GAINESVILLE	2	2	0	0	0	0	2
8	MIAMI	4	0	0	4	0	0	0
9	MOUNTAIN HOME	4	1	2	0	0	0	3
10	CHILLICOTHE	4	0	0	2	1	1	4
10	CINCINNATI	4	1	0	3	0	0	4
10	CLEVELAND	4	3	0	1	0	0	4
10	COLUMBUS	2	1	0	0	1	0	2
10	DAYTON	4	1	1	1	1	0	4
11	ANN ARBOR+	0						
11	BATTLE CREEK	1	0	0	1	0	0	1
11	DETROIT+	0						
12	CHICAGO-WEST SIDE	3	0	0	0	3	0	3
12	MADISON	5	0	0	2	0	0	2
12	NORTH CHICAGO	3	1	1	1	0	0	3
13	MINNEAPOLIS	3	3	0	0	0	0	3
14	KNOXVILLE	4	0	1	1	2	0	4
17	DALLAS	2	0	0	2	0	0	2
17	WACO*	3						0
19	DENVER	3	0	0	0	2	0	2
19	SOUTHERN COLORADO	3	1	1	0	1	0	3
20	AMERICAN LAKE	3	1	0	2	0	0	3
20	BOISE	4	2	0	1	0	0	3
20	PORTLAND	2	0	1	1	0	0	2
20	SEATTLE	2	2	0	0	0	0	2
20	SPOKANE	5	1	0	2	2	0	5
21	SAN FRANCISCO	3	1	2	0	0	0	3
22	WEST LA	3	0	0	0	3	0	3
	OUTLIER SITES (N)	43	24	14	24	14	3	39
	OUTLIER SITES (%)	100.0%	60.0%	35.0%	60.0%	35.0%	7.5%	90.7%
	OUTLIER RESPONSES (N)	139	35	17	42	22	3	115
	OUTLIER RESPONSES (%)	100%	25.2%	12.2%	30.2%	15.8%	2.2%	82.7%

Source: MHICM Outlier Review, FY 2000

* Did not submit Minimum Standard Outlier Review

+ No Outliers

Figure 2-1. Travel Distance from MHICM offices to veteran residence.
Percent of veterans with case manager reported follow-up data (N=1821).

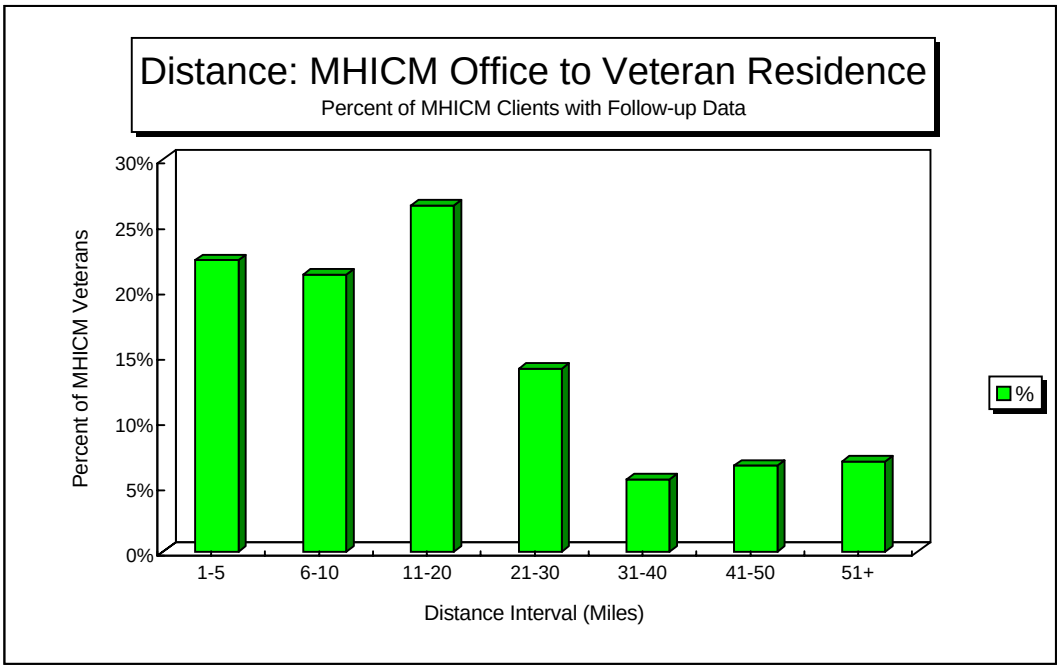


Figure 2-2. Travel Time from MHICM offices to veteran residence.
Percent of veterans with case manager reported follow-up data (N=1794).

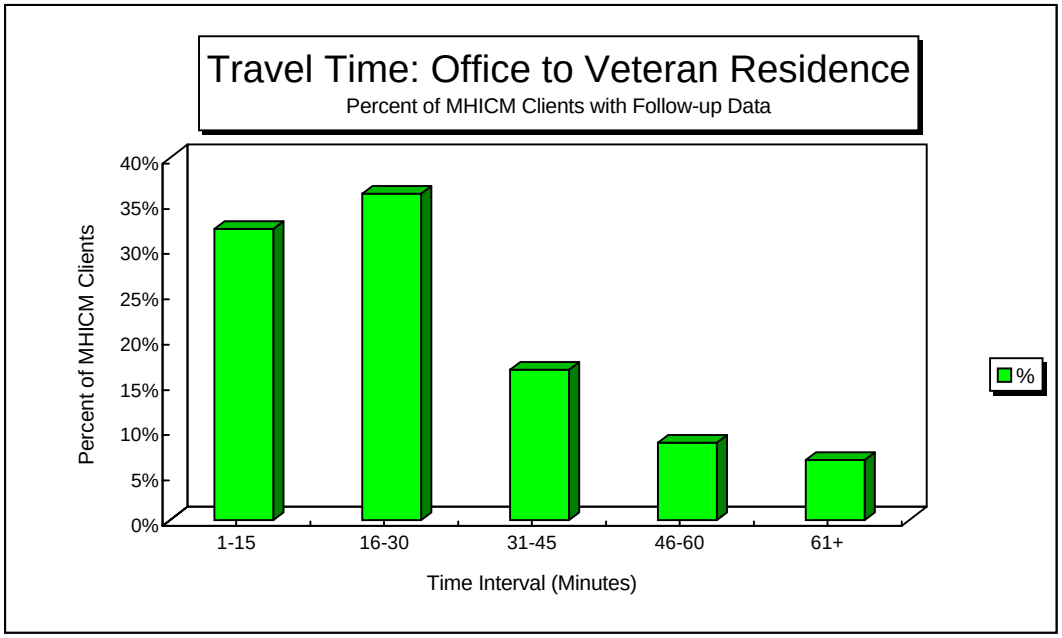


Figure 2-3. MHICM clients reporting expression of violence or criminal justice involvement.
Percent at entry (N=2491) vs. Follow-up (N=1835).

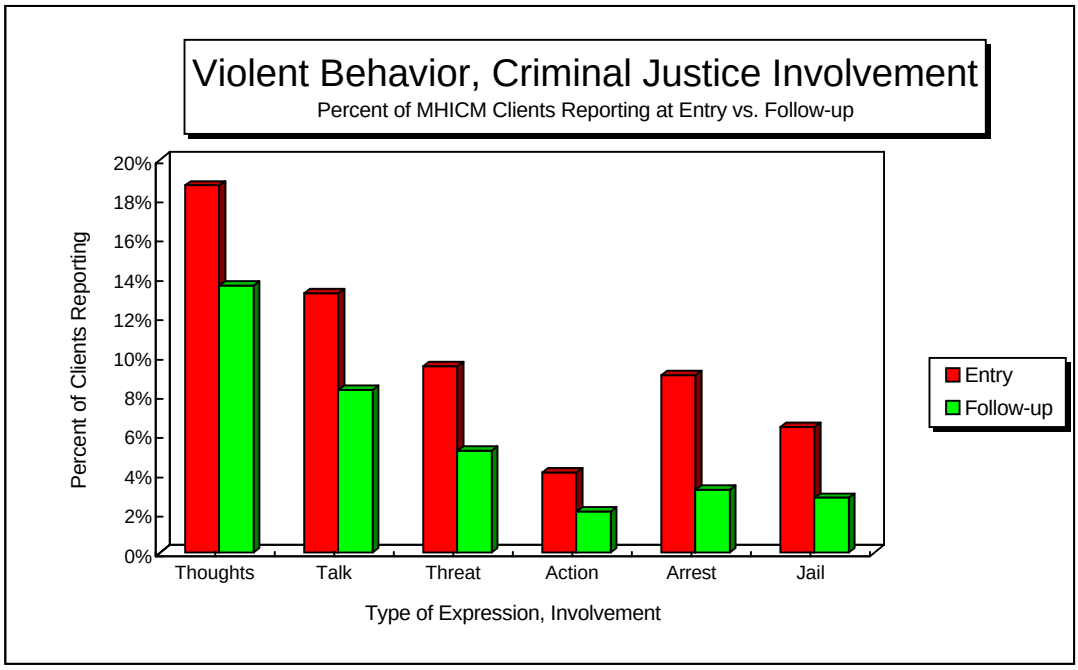


Figure 2-4. MHICM clients reporting expression of suicidality, hospitalization.
Percent at entry (N=2494) vs. Follow-up (N=1834).

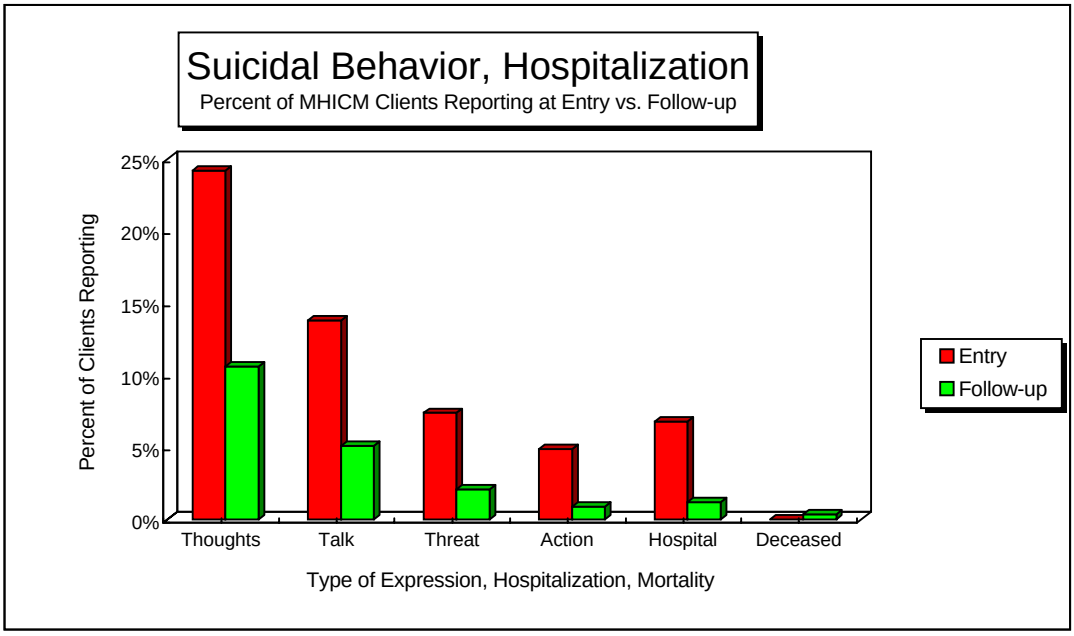


Figure 2-5. MHICM clients reporting living arrangements by level of independence.
Percent at entry (N=2050) vs. follow-up (N=1957).

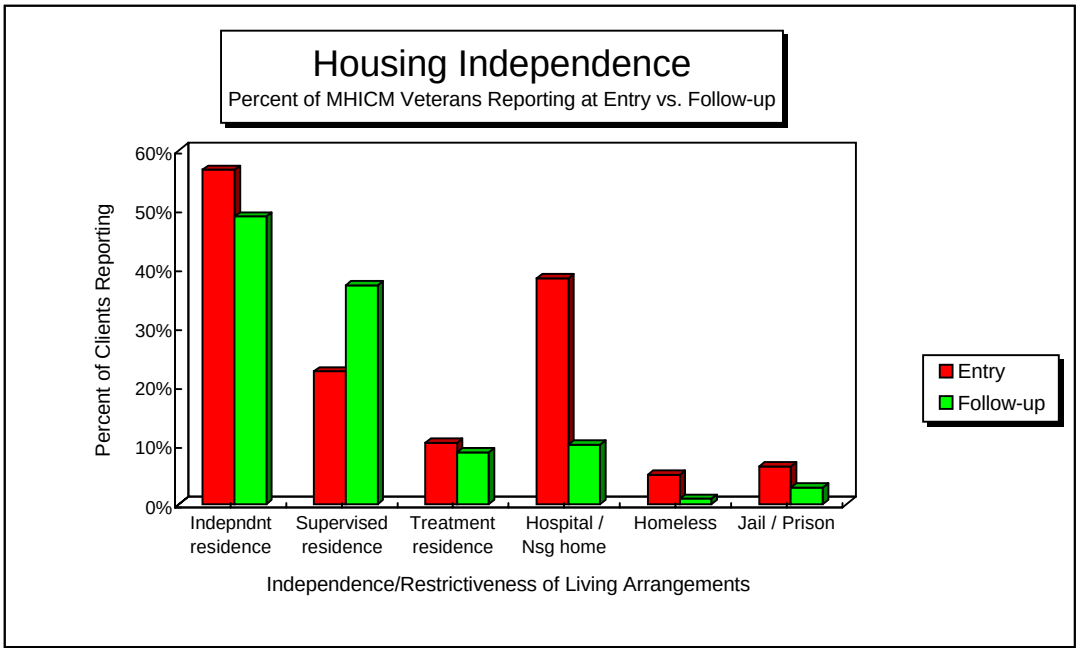
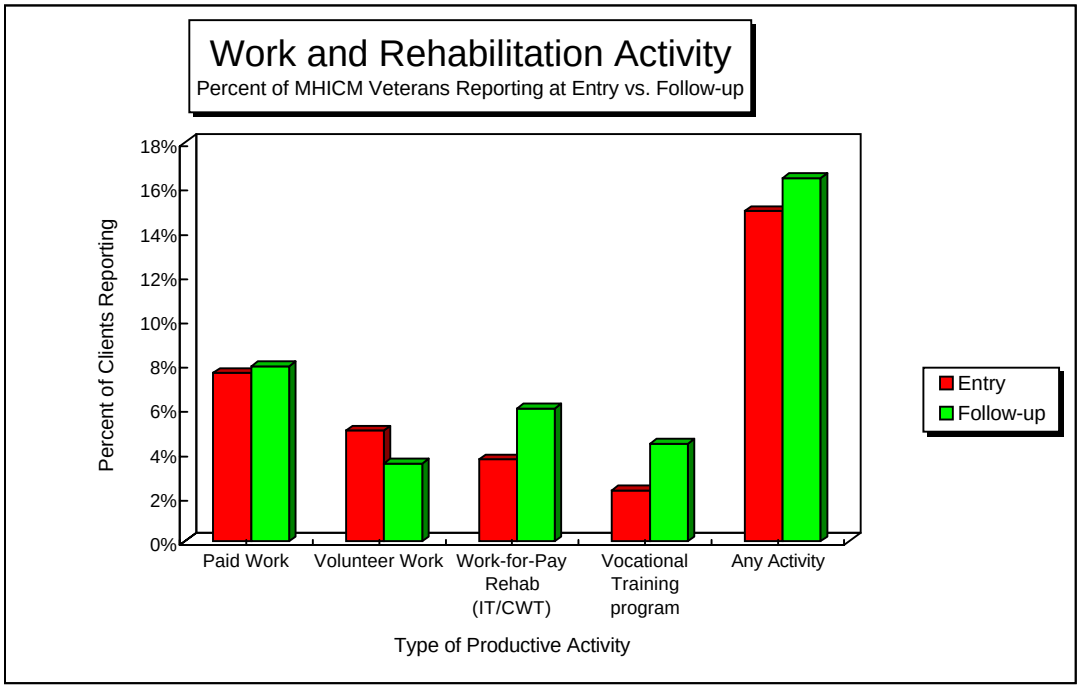


Figure 2-6. MHICM clients reporting participation in productive activity.
Percent at entry (N=2636) vs. follow-up (N=1957).



Appendices

Appendix A. VHA Directive 2000-034 ("MHICM Directive")
Appendix B. MHICM Planning Material & Checklists
Appendix C. Outlier Review Request and Form
Appendix D. Legend for MHICM Performance Report Tables
Appendix E. MHICM and Low Intensity Case Management Visits

Appendix A

Department of Veterans Affairs **VHA DIRECTIVE 2000-034**
Veterans Health Administration
Washington, DC 20420 **October 2, 2000**

VHA MENTAL HEALTH INTENSIVE CASE MANAGEMENT (MHICM)

1. PURPOSE: This Veterans Health Administration (VHA) Directive describes a new initiative in mental health intensive case management (MHICM) for seriously mentally ill veterans. ***NOTE:*** *This initiative takes the place of existing Intensive Psychiatric Community Care (IPCC) programs, Intensive Community Case Management (ICCM) programs, as well as other similar assertive community treatment (ACT) programs within VHA.*

2. BACKGROUND

a. Severe mental illness, primarily psychoses, is a major problem among veterans. Fiscal Year (FY) 1998 Compensation and Pension (C&P) data indicate that 136,362 veterans are service-connected for psychoses of which over 67,700 use VHA services. Over 174,030 veterans with psychoses, overall, used VHA services in FY 1998. The clinical literature suggests that approximately 20 percent of severely mentally ill patients are in need of intensive community case management services in the typical public mental health system. This intensive multidisciplinary team approach to ambulatory management and treatment of patients in, and coordinated with the community and its services, is clearly distinguished from usual case management by: engagement in community settings of highly dysfunctional patients traditionally managed in hospitals; an unusually high staff to patient ratio; multiple visits per week if needed; interventions primarily in the community rather than in office settings; and fixed team responsibility, around the clock, for total patient care over a prolonged period (see subpar. 2e(2)). Multiple studies, including three recent VHA studies, have shown that the intervention is cost effective, particularly where the service is offered to chronically ill, hospitalized patients and where the model is rigorously adhered to with respect to assertiveness of the intervention and maintaining low caseloads (see sub par. 2d). There is compelling evidence for the effectiveness of ACT in patients with psychosis, but its use may also be considered in severe and persistent affective disorder, post-traumatic stress disorder (PTSD), etc., where independent functioning is impaired. A FY 1998 survey by the Committee on Care of Severely Chronically Mentally Ill (SCMI) Veterans revealed that just over 8,000 veterans currently received some form of mental health team case management from VHA, and of those, only 2,000 met ACT Fidelity Measures criteria for intensive case management. Therefore, a gap in these state-of-the-art services is evident, resulting in unnecessary costs and patient morbidity to VHA.

b. On March 25, 1999, in order to obtain a wider range of views in formulating a VHA-wide approach, the Chief Network Officer appointed a SCMI Strategic Implementation Committee composed of four Clinical Managers, a medical center Director, a Mental Health Care Line Director, the National Director of the Northeast Program Evaluation Center (NEPEC), a representative of Vietnam Veterans Association, and a representative of the Mental Health Strategic Healthcare Group.

THIS VHA DIRECTIVE EXPIRES OCTOBER 31, 2005

c. The SCMI Strategic Implementation Committee considered various models of intensive case management within the Mental Health service area, then defined intensive case management for the severely mentally ill in VHA and the accountability expected from this designated program.

d. MHICM is a cost effective intervention given appropriate case selection. This may seem like a paradox given the known resource intensity of the interventions. The efficiency (offset) results from avoidance of other costly interventions such as multiple or lengthy hospitalizations, and extensive ambulatory clinic use, including visits to emergency rooms. Paragraph 3 notes that these programs need to be established from existing funds. To realize the efficiency and accomplish this out of existent resources requires a shift of resources that previously supported the extensive inpatient and outpatient use to underwrite MHICM. It is acknowledged that there will be a need for expedited mental health resource shifts, as well as shifts from other programs that gain economies from implementation of MHICM, including bed closures, where justified, as this more effective alternative of MHICM is implemented.

e. **Definitions**

(1) **Target Population.** MHICM programs are intended to provide necessary treatment and support for veterans who meet all of the following five criteria:

(a) Diagnosis of Severe and Persistent Mental Illness. Diagnosis of severe and persistent mental illness includes, but is not limited to: schizophrenia, bipolar disorder, major affective disorder, or severe post-traumatic stress disorder;

(b) Severe Functional Impairment. Severe functional impairment is such that the veteran is neither currently capable of successful and stable self-maintenance in a community living situation nor able to participate in necessary treatments without intensive support;

(c) Inadequately Served. This means inadequately served by conventional clinic-based outpatient treatment or day treatment;

(d) High Hospital Use. High hospital use as evidenced by over 30 days of psychiatric hospital care during the previous year or three or more episodes of psychiatric hospitalization;

(e) Clinically Appropriate for MHICM Approach. Patients who are more appropriately managed clinically as inpatients need to remain in the inpatient setting; that is, the positive aspects of MHICM should not be used to justify moving patients who would be better served by inpatient care to this ambulatory care model.

(2) **Description of the Program.** MHICM programs are delivered by an integrated, multidisciplinary team and are based on the Substance Abuse Mental Health Services Administration (SAMHSA) ACT standards. There are four core treatment elements:

(a) Very Frequent Contacts between Care Givers and Patients. The treatment process would include two phases:

1. High intensity of care primarily through home and community visits, with low caseloads (seven to fifteen veterans per clinician), allowing rapid attention to crisis and development of community living skills to prevent crisis in this exceptionally vulnerable population.

2. Appropriate transition to lower intensity care. After 1 year of MHICM treatment, patients can be transferred to either standard care or to continuous treatment by the MHICM team at a lower level of intensity (e.g., with caseloads of up to 30 per clinician). Characteristics of the readiness for a lower level of care would include the following: patients are clinically stable, not abusing addictive substances, not relying on extensive inpatient or emergency services, capable of maintaining themselves in a community living situation, and independently participating in necessary treatments. ***NOTE:*** *NEPEC will monitor this transition through periodic clinical progress reports and will report both levels of intensity separately.*

(b) Flexibility and Community Orientation. Flexibility and community orientation with most services provided in community settings and involving integration with natural support systems whenever possible (e.g., family members, landlords, employer).

(c) Focus on Rehabilitation. Focus on rehabilitation through practical problem solving, crisis resolution, adaptive skill building, and transition to self-care and independent living where possible.

(d) Responsibility. Identification of the team as a "fixed point of clinical responsibility" providing continuity of care for each veteran, wherever the veteran happens to be, for a prolonged period. This is expected to initially be 1 year, but subsequently will be based on a periodic review of continuing need for intensive services.

(3) **Data Recording**

(a) Attachment A-A. Attachment A-A contains the definitions of the revised Decision Support System (DSS) Identifiers for the MHICM workload (546 and 552) as well as the new code for general (non-intensive) mental health case management (564).

(b) Attachment A-B. Attachment A-B provides Veterans Integrated Service Networks (VISNs) and Department of Veterans Affairs (VA) leadership with population-based data to help facilitate assessment of the need for MHICM teams in each VISN. These data include the number of:

1. Veterans who meet inpatient utilization criteria (30 days of psychiatric hospitalization or three admissions);

2. Outpatients who meet diagnostic criteria for schizophrenia, bipolar, or major affective disorder and had six or more mental health outpatient contacts in FY 1998;

3. Veterans in the Psychiatric Special Care category under the Veterans Equitable Resource Allocation (VERA) system, and

4. Psychiatric patients with lengths of stay over 1 year.

(c) After a period during which new teams will be added to the roster of MHICM teams participating in the national program, NEPEC will present a data summary for each VISN of the ratio of MHICM-treated patients to those potentially eligible as estimated by each of the indicators of population need identified in Appendix B. VISNs may use these data to identify potential service gaps.

3. POLICY: It is VHA policy to support the development of case management approaches sufficient to meet the need where appropriate. Where the need for intensive mental health case management is demonstrated, MHICM programs need to be established out of existing funds (see subpar. 2d). ***NOTE:*** *NEPEC, which has developed and evaluated this type of program for 10 years, is providing the leadership for training and monitoring of new and established teams.*

4. ACTION

a. **Facility Actions.** Facilities are to:

(1) Utilize national DSS identifiers to designate MHICM activity.

(2) Provide complete nationally-adopted monitoring information for MHICM in a timely manner.

(3) Maintain team fidelity to the operating principles as described in the program description (see subpar. 2e(2)) and adhere to evidence-based clinical procedures. Adequate resources are needed to provide a critical mass of staff to comprehensively address the needs of these exceptionally vulnerable patients, even in the face of staff turnover and other absences. ***NOTE:*** *At least four clinical Full-time Employee Equivalent (FTEE) are needed for each MHICM team. Additional team members may be required in circumstances where the team is isolated from a VA medical center that can provide 24-hour coverage and emergency services. At sites where there are insufficient patients to justify a full team, consideration is to be given to partnering with the community, e.g., existing ACT teams.*

b. **Monitoring and Training Actions.** Because MHICM is resource intensive and the participating veterans are vulnerable, the following monitoring procedures will be implemented under the leadership of NEPEC. ***NOTE:*** *Forms may be obtained by contacting NEPEC by e-mail at "Robert.Rosenheck@med.VA.gov" or telephone at (203) 937-3850.*

(1) **Standard Intake Data Form (IDF).** Standard IDF will be administered to all new admissions to MHICM. It will document adherence to the eligibility criteria listed above and record baseline data on clinical status, functional impairment, and satisfaction with services. The IDF takes about 30 to 45 minutes to complete per patient.

(2) **Follow-up Data Form (FDF).** Follow-up FDF must be administered 6 months and 1 year after program entry and annually thereafter. It consists of a subset of health status and community adjustment measures from IDF. The FDF takes about 25 to 30 minutes to complete per patient.

(3) **A Clinical Process Form (CPF).** A CPF will document delivery of MHICM service elements and will be completed by each client's primary case manager every 6 months after program entry. The CPF takes about 15 minutes to complete on each patient.

(4) **MHICM Check List and ACT Fidelity Measure.** The MHICM Check List and ACT Fidelity Measure is to be completed by the program director once a year for the entire program. This form takes about 20 minutes to complete.

(5) **VHA Administrative Data**. VHA administrative data will be used to track MHICM process and outcomes using inpatient and outpatient service utilization data available from the Patient Treatment File and the Outpatient Care File in the Austin Data Processing Center.

c. **Mental Health Strategic Healthcare Group (MHSHG) Actions**. The MHSHG will:

(1) Assess, deploy, evaluate, and disseminate quality and cost efficient best practices by utilizing NEPEC, Management Science, and Allocation Resource Center data and expertise.

(2) Oversee effectiveness of MHICM program, monitoring, training, and evaluation by convening a broad based panel of experts to assess clinical and deployment outcomes and to determine future actions.

(a) The expert panel will consist of a NEPEC-based Chair (non-voting), five field members including a Chief Financial Officer (CFO), and three NEPEC and/or VHA Headquarters members. The panel will meet as needed but at least quarterly.

(b) The expert panel will provide a regular biannual summary report of its findings, conclusions and recommendations to the Policy Board.

(c) The expert panel will be responsible for preparing an annual cost and benefit analysis for the Policy Board.

(d) The expert panel will oversee, account, and provide a progress report to the Policy Board at appropriate times, but no less than annually, on the shift of resources to offset the resource needs of the MHICM program.

d. **NEPEC Actions.** NEPEC will:

(1) Provide direct oversight to all MHICM programs to ensure that standards are met through periodic site visits to treatment teams, regular national meetings of team leaders, conference calls, consultation, and national training programs. Programs systematically not meeting standards may be decertified from using the MHICM DSS Identifiers.

(2) Make additional efforts to integrate this data collection into standard VA computerized data systems, to provide sites with spreadsheet summaries of national and site-by-site program results on a regular basis, and to provide clinicians with client-specific output for clinical review.

(3) Be responsible for:

(a) Producing periodic reports on the structure, process, and outcomes of MHICM services for training programs in evaluation and clinical procedures.

(b) Working with the expert panel and its CFO (see subpar. 4c(2)) in the development of an effective costing system, such as activity-based costing, to account the MHICM program.

(c) Facilitating ongoing communication and linkage among programs across the country.

(d) Generating reports on VISN-level population-based needs assessments.

(e) Informing VISN and VA facility-level leadership where standards are problematic and recommending actions to strengthen the MHICM teams.

e. **Network Action**. Each Network will be responsible for:

(1) Addressing population-based needs for MHICM services;

(2) Establishing strategies to provide their severely mentally ill veterans within the described target population (see subpar. 2e(1)) access to MHICM services sufficient to meet the need, and

(3) Supporting recommendations by NEPEC to maintain MHICM standards.

5. REFERENCES: VHA Program Guide 1103.3, June 3, 1999, pages 9-11, 47. ***NOTE:*** *See <http://vaww.mentalhealth.med.va.gov/MHICMRef.htm> on VHA intranet for current clinical references.*

6. FOLLOW-UP RESPONSIBILITY: The Chief Consultant, Mental Health Strategic Healthcare Group (116) is responsible for the contents of this Directive.

7. RESCISIONS. None. This VHA Directive expires the last working day of September 2005.

Thomas L.Garthwaite, M.D.
Under Secretary for Health

Attachments

DISTRIBUTION: CO: E-mailed 10/05/00
FLD: VISN, MA, DO, OC, OCRO, and 200 - FAX 10/05/00
EX: Boxes 104, 88, 63, 60, 54, 52, 47, and 44 - FAX 10/05/00

ATTACHMENT A-A: NEW DSS IDENTIFIER (STOPCODE) CHANGES FOR FISCAL YEAR 2000

(Abstracted from VHA Directive 2000-009)

Name/ Description	Stop code	CDR Account	Effective Date	Definition
TELEPHONE/MHICM	546	2780.00	10/1/99	Records patient consultation or psychiatric care, management, advice, and/or referral provided by telephone contact between patient or patient's next of kin and/or the person(s) with whom the patient has a meaningful relationship, and clinical, professional staff assigned to the special MHICM teams (see #552). Includes administrative and clinical services. **Provisions of 38 U.S.C. Section 7332 requires that records which reveal the identity, prognosis, diagnosis, or treatment of VA patients which relate to drug abuse, alcoholism or alcohol abuse, infection with HIV, or sickle cell anemia, are strictly confidential and may not be released or discussed unless there is written consent from the individual.
MENTAL HEALTH INTENSIVE CASE MANAGEMENT (MHICM)	552	5117.00	10/1/99	Only VA medical centers approved to participate in MHICM (previously IPCC) programs monitored by NEPEC may use this code. This records visits with patients and/or their families or caregivers by MHICM staff at all locations including VA outpatient or MHICM satellite clinics, MHICM storefronts, MHICM offices, or home visits. Includes clinical and administrative services provided MHICM patients by MHICM staff. Additional stop codes may not be taken for the same workload.
GENERAL TEAM CASE MANAGEMENT	564	2311.00	10/1/99	Records visits with patients and/or their families or caregivers by members of a case management team performing mental health community case management at all locations. Includes administrative and clinical services provided to patients by team members. NOT to be used for visits by MHICM teams (see #552) or for case management by individuals who use other stop codes.

ATTACHMENT A-B: MHICM TREATMENT POPULATION ESTIMATE FOR PLANNING PURPOSES

	Population Statistics			Discharged Psychiatric Inpatients (1)			Seriously Mentally Ill MH Outpatients			Psychiatric Complex VERA Class Patients (CMI)				Long-Term Inpatients (>1 yr LOS)		
VISN	Total Veterans	Eligible for VA Services	SC for MH Problem	Total Psychiatric Inpatients (1)	Percent Inpatients Eligible for MHICM (2)	Number Inpatients Eligible for MHICM (2)	Total SMI Out-patients (3)	Percent Out Pt's with 6 OP MH Visits (4)	Number Out Pt's with 6 OP MH Visits (4)	Schizophrenia and Dementia	Other Psycho-sis	PTSD	Total	Bed Psych.	Sections Med/ Surg	Total
1	1,500,892	358,094	32,435	5,204	30.9%	1,606	14,489	56.7%	8,220	926	324	435	1,685	94	20	114
2	697,421	194,415	12,296	2,355	41.8%	985	6,699	59.1%	3,961	440	171	200	811	18	0	18
3	1,595,593	335,211	29,644	4,716	45.9%	2,166	13,823	60.4%	8,348	1,250	377	505	2,132	196	23	219
4	1,819,870	497,402	27,526	5,047	35.7%	1,801	14,315	53.5%	7,660	930	295	465	1,690	51	9	60
5	857,564	168,218	9,715	3,405	29.3%	998	7,521	57.3%	4,310	502	112	365	979	62	13	75
6	1,251,189	360,885	22,017	4,936	30.1%	1,487	8,955	44.9%	4,023	501	149	319	969	64	1	65
7	1,367,528	399,439	25,458	4,888	29.1%	1,422	13,664	51.0%	6,967	790	175	569	1,534	67	43	110
8	1,634,357	482,839	43,852	5,083	18.3%	931	22,052	43.8%	9,658	440	247	506	1,193	0	0	0
9	1,060,416	367,654	21,666	4,246	21.9%	931	10,626	42.2%	4,481	391	136	169	696	65	0	65
10	1,151,473	318,983	16,861	3,993	32.9%	1,314	9,416	60.4%	5,691	720	196	372	1,288	4	0	4
11	1,651,186	427,356	18,906	4,240	24.2%	1,025	10,279	44.1%	4,528	849	188	284	1,321	193	25	218
12	1,362,314	319,235	15,530	4,372	39.8%	1,739	10,012	57.7%	5,773	606	368	410	1,384	70	0	70
13	707,005	210,110	11,153	2,533	40.9%	1,036	6,890	63.1%	4,346	317	173	190	680	1	0	1
14	516,075	153,798	6,675	1,711	41.2%	705	3,826	45.3%	1,732	194	102	140	436	0	0	0
15	1,071,604	329,293	15,963	4,152	27.3%	1,132	11,016	47.5%	5,229	540	277	342	1,159	7	0	7
16	1,887,301	651,983	39,737	6,995	30.9%	2,163	17,424	45.1%	7,865	877	256	534	1,667	1	0	1
17	1,026,699	321,378	17,795	3,727	37.4%	1,394	9,412	43.0%	4,046	669	314	404	1,387	169	1	170
18	842,132	276,151	15,687	2,833	18.0%	511	9,182	53.9%	4,945	152	118	274	544	0	0	0
19	731,842	215,445	11,835	2,490	34.1%	850	8,137	59.9%	4,876	317	195	337	849	0	0	0
20	1,191,422	342,926	21,245	4,444	32.7%	1,452	10,381	54.9%	5,702	301	227	416	944	0	0	0
21	1,418,772	338,504	19,259	3,292	38.2%	1,257	11,108	60.2%	6,689	518	263	524	1,305	0	0	0
22	1,841,007	418,847	20,114	3,627	29.5%	1,069	17,070	55.5%	9,478	713	463	364	1,540	1	0	1
TOTAL	27,183,662	7,488,166	455,369	88,289	31.7%	27,974	246,297	52.18%	128,528	12,943	5,126	8124	26,193	1,063	135	1,198
AVG	1,235,621	340,371	20,699	4,013	32.3%	1,272	11,195	52.70%	5,842	588	233	369	1,191	48	6	54
STD	397,725	113,743	9,168	1,171	7.4%	425	4,042	6.80%	1,982	268	93	121	420	63	11	70
CV	0.32	0.33	0.44	0.29	0.23	0.33	0.36	12.90%	0.34	0.46	0.40	0.33	0.35	1.30	1.85	1.28

(1) Discharged from Psychiatric bed sections, or other acute bed sections, or Domiciliary care with psychiatric primary diagnosis (excluding addictive disorders).

(2) Either greater than 30 bed days of care per year OR 3 or more admissions.

(3) Diagnosis of schizophrenia, major affective disorder, or bipolar disorder (ICD-9 codes 295.00-296.99).

(4) The official definition of an SMI patient in VA's capacity monitoring requires 6 or more OP visits per year.

Appendix B

July 26, 2001

Director, NEPEC / VA MHICM/IPCC Project Director

MHICM Planning Guidelines

Facility or VISN Representative

1. Thank you for your interest in VA Mental Health Intensive Case Management (MHICM) programs (formerly known as Intensive Psychiatric Community Care or IPCC). In response to many inquiries about MHICM teams, we have assembled this package of materials and guidelines to help VA facility and network level planners evaluate the benefits of implementing an MHICM team. It includes:

A. Descriptive materials: 1) summary of the program's history and scientific foundation; 2) summary of the program's mission, objectives, and monitoring domains; 3) brief bibliography; 4) list of current MHICM teams.

B. Standards and Implementation Checklist: 1) outline of minimum standards and expectations for starting an MHICM team; 2) MHICM implementation checklist.

C. Report and literature: 1) FY 2000 NEPEC IPCC report; 2) 1998 IPCC outcomes paper.

2. **Would you like to learn more about Mental Health Intensive Case Management (MHICM)?**

To learn more about the history, principles, and outcomes of MHICM, review the descriptive materials and literature.

3. **Are you interested in starting an MHICM team at your facility or in your VISN?**

To learn more about key elements of an MHICM team, review the enclosed minimum standards and the MHICM implementation checklist.

4. **Have you considered reconfiguring an existing staff unit into an MHICM team?**
How closely do your community services resemble MHICM?

To compare a planned or existing program with MHICM services, review the enclosed minimum standards and complete the enclosed MHICM implementation checklist. Scoring your planned or existing community services team with the checklist will help us know how best to work with you.

5. **Could an MHICM team improve mental health services at your facility? Could NEPEC training and monitoring enhance the effectiveness or efficiency of an existing team?**

NEPEC publishes an annual report on MHICM teams with extensive information on program operation, as well as scientific papers in peer-reviewed journals. To learn more about NEPEC monitoring of MHICM teams, look at Chapter 2 in the FY 2000 report for tables on MHICM client characteristics, program structure, service delivery, clinical outcomes, and costs. Appendix C provides a legend for each table. To learn more about MHICM outcomes, review the clinical and cost data from the Archives of General Psychiatry paper on the original IPCC experimental evaluation.

6. **Would you like NEPEC's assistance with starting or reconfiguring a team, training staff, or monitoring outcomes at your facility?**

To request consultation and training to establish an MHICM team, to reconfigure an existing program to MHICM, or to include an existing community treatment team in NEPEC national monitoring, please send a completed copy of the enclosed MHICM Implementation checklist to:

Robert Rosenheck MD
Northeast Program Evaluation Center (NEPEC)/182
VA Connecticut Healthcare System
950 Campbell Avenue, West Haven, CT 06516
203-937-3850.

7. Thanks again for your interest in MHICM services for veterans with serious mental illness.
We hope the enclosed materials are helpful to you.

Robert Rosenheck, M.D.
Director, NEPEC

Michael Neale, Ph.D.
VA MHICM Project Director

What is Mental Health Intensive Case Management (MHICM)?

VA Mental Health Intensive Case Management (MHICM) teams provide community-based psychiatric and rehabilitation services to veterans with serious mental illness who are among the most frequent and long-term users of VA inpatient mental health resources. MHICM services are characterized by high staff to client ratios, shared caseloads, assertive outreach, frequent contact in community settings, a practical problem-solving approach, and high continuity of care. Interdisciplinary teams assume primary care responsibility and provide individualized care to help veterans: 1) reduce inpatient mental health service use and cost; 2) improve community adjustment and quality of life; and 3) enhance satisfaction with services. All MHICM veterans and staff participate in standardized national monitoring of program resources, client characteristics, service delivery, and outcomes in collaboration with the Northeast Program Evaluation Center (NEPEC). Evaluation and monitoring data have demonstrated the clinical and cost effectiveness of MHICM.

Cost effectiveness studies have shown that programs like MHICM are effective and efficient in the VA system. In FY 1998, on the recommendation of VA's Special Committee for Veterans with Serious Mental Illness, the Under-Secretary for Health encouraged dissemination of MHICM community-based services throughout the VA Healthcare System on the basis of population-based need. There are two manuals and a set of accreditation standards for assertive community treatment (ACT) services, on which MHICM/IPCC programs are based. MHICM staffing standards (at least 3-4 FTEE) represent a minimum relative to published ACT standards (i.e., 8-15 FTEE). A MHICM team should have sufficient staff to provide the comprehensive, intensive community-based services the standards suggest. Because MHICM teams are less richly staffed than standard ACT teams, there are occasions when clients must be referred for day treatment, medical, substance abuse, or vocational services. On the other hand, the location of MHICM teams within integrated VA mental health service systems allows most veterans to receive a broad range of services with continuous team support and minimal fragmentation.

More than 50 teams currently provide MHICM services to over 2600 veterans in 24 states nationwide:

AL:	Tuskegee (Montgomery)	MI:	Ann Arbor	OH:	Youngstown-Warren
AR:	[Little Rock]		Battle Creek	OR:	Portland
CA:	San Francisco		Detroit	PA:	Coatesville
	West Los Angeles	MN:	Minneapolis		Pittsburgh
CO:	Denver		[St. Cloud]	TN:	Mountain Home ~
	Grand Junction	MT:	[Fort Harrison]	TX:	Dallas
	Southern Colorado	NJ:	East Orange		[Houston]
CT:	West Haven	NY:	Albany	UT:	Salt Lake City
FL:	Gainesville		Brooklyn	WA:	American Lake
	Miami		Buffalo		Seattle
GA:	Atlanta		Canandaigua		Spokane ~
	Augusta		Montrose	WI:	Madison
ID:	Boise		Syracuse		[Milwaukee]
IL:	Chicago (West Side)	NC:	Salisbury	WY:	Sheridan
	North Chicago	OH:	Akron		
IA:	Knoxville/Des Moines		Chillicothe		
MA:	Bedford		Cincinnati		
	Brockton		Cleveland	[ ] team in development	
MD:	Perry Point		Columbus	~ staff reassigned other duties	
ME:	Togus		Dayton		
			Lorraine-Sandusky		

What are the minimum standards for an effective MHICM team?

Successful implementation of MHICM requires the following explicit administrative commitments, warranted by past experience and the relative resource intensity of MHICM services:

- Target veterans with **serious mental illnesses** and **impaired community functioning** (typically psychotic disorders, with or without accompanying substance abuse) who are **high utilizers of VA inpatient, residential, or crisis mental health services** (for whom traditional services have not resulted in stable community adjustment);

- Provide a dedicated staff of **at least four clinicians** including at least one nurse as well as psychiatric and office support. Larger teams staff have generally proven to be more effective and enduring.

- Promote **team cooperation and morale** to enhance efficiency and continuity (crucial to team success);

- Identify a **team leader** whose duties include liaison with VA and community representatives, supervision of MHICM staff, and delivery of clinical services in the community;

- Support **frequent client contact** and **delivery of clinical services in the community**, including in vivo assessment, medication delivery, skills training, and rehabilitation services.

- Assure **off-hours team access** for guidance of inpatient and emergency clinical staff;

- Provide **ancillary resources** for safe and efficient community services, including:
    - fixed, economical **team space**, at or near the medical center/clinic;
    - dedicated **vehicles** for daily community visits by each clinician;
    - dedicated **communication technology** (beepers, cell phones) to assure staff and client safety;
    - electronic **office technology** (computers, copier, answering machine, fax machine) for organizing, charting, and monitoring clinical work;

- Establish **integrated links** between the MHICM team and other mental health / rehabilitation services (inpatient, outpatient, and community) to enhance service coordination;

- Maintain a **clear line of authority**, with the team leader represented in the mental health service or product line; and

- Assure **quality and accountability through monitoring** of program effectiveness and cost.

What is the history and success of MHICM?

Mental Health Intensive Case Management (MHICM) programs represent the adaptation, within VA, of **assertive community treatment (ACT)**, a model developed in the 1970's by Arnold Marx, Leonard Stein, and Mary Ann Test in Madison, Wisconsin (1-6). ACT is one of the most heavily researched psychiatric services for people with serious mental illness, recently recommended as a state of the art intervention by the Schizophrenia Patient Outcomes Reseach Team (PORT) study (7). The intent of ACT developers was to make the comprehensive services and support of an inpatient unit available to outpatients in the community, integrated within a single team. ACT helps people to reduce psychiatric inpatient hospital use and improve community adjustment, quality of life, and satisfaction with services (8-11). Implementation data further demonstrate that the success of a given ACT team is influenced by team fidelity to the model, staff cohesiveness, and host agency support for outpatient treatment (12-15). In 1998, the National Alliance for the Mentally Ill (NAMI) adopted the Madison ACT model as a central element of its national anti-stigma campaign.

Initially funded as a regional mental health demonstration program in 1987, nine original MHICM teams were compared via experimental design with standard VA aftercare services. Two-year findings revealed that MHICM veterans had significantly fewer hospital days and lower costs overall than veterans receiving standard VA treatment. Clinically, MHICM veterans scored significantly lower in psychiatric symptoms, and higher in functioning and satisfaction with services (16-17). Five-year outcomes showed sustained reductions in hospital use and improvements in psychiatric symptoms, functioning, and personal well-being for MHICM clients (18). Compared to a randomly assigned control group, 454 MHICM veterans averaged 158 fewer hospital days over five years. After accounting for program costs, the nine MHICM programs were responsible for VA cost reductions estimated at $12.8 million, or $2.6 million per year. The program was most successful at facilities that adhered to the model and showed performance improvements in other areas as well (15).

With the demonstration's success, 30 new MHICM teams were funded in 1994-95 as part of a national VA initiative that used successful teams as mentors for developing programs. System-wide monitoring data (FY 1997-98) indicate that: 1) MHICM programs serve veterans with severe, long-standing disabilities (77% psychotic diagnosis; 58% hospitalized for more than two years; mean of 135 hospital days in year preceding entry; 47% funds managed by representative payee); 2) MHICM staff provide frequent, continuous services in the community; 3) MHICM veterans show substantial reductions in hospital use (mean 87 days per veteran during the first twelve months of treatment) with commensurate reductions in inpatient costs ($74.4 million for 1659 veterans treated for twelve months); and 4) MHICM veterans show significant improvements in symptoms, functioning, quality of life, and satisfaction after six months in the program (18-19).

MHICM offers a tested and effective model for community-based treatment and rehabilitation of veterans with serious mental illness who are high users of VA psychiatric inpatient resources. It is consistent with principles underlying VA's recent reorganization that emphasize novel outpatient delivery systems, enhanced accessibility, customer satisfaction, and cost savings. On the basis of MHICM's demonstrated effectiveness, the Mental Health Strategic Healthcare Group (MHSHG) and the VA Under Secretary's Special Committee for Severely Chronically Mentally Ill Veterans (SMI Committee) have encouraged NEPEC to assist VA facilities and networks with MHICM team development by providing training, technical assistance, and monitoring.

Program Objectives and Principles

MHICM services are delivered by integrated, multidisciplinary teams and are based on the Substance Abuse Mental Health Services Administration (SAMHSA) ACT standards. MHICM teams seek to deliver high quality services that:

- provide intensive, flexible community support;
- improve health status (reduce psychiatric symptoms & substance abuse);
- reduce psychiatric inpatient hospital use and dependency;
- improve community adjustment, functioning, and quality of life;
- enhance satisfaction with services; and
- reduce treatment costs.

To accomplish these objectives, MHICM teams adhere to four core treatment elements:

- Intensity of Contact. High intensity of care primarily through home and community visits, with low caseloads (seven to fifteen veterans per clinician), allowing rapid attention to crisis and development of community living skills to prevent crisis in this exceptionally vulnerable population.
- Flexibility and Community Orientation. Flexibility and community orientation with most services provided in community settings and involving integration with natural support systems whenever possible (e.g., family members, landlords, employer).
- Rehabilitation Focus. Focus on rehabilitation through practical problem solving, crisis resolution, adaptive skill building, and transition to self-care and independent living where possible.
- Continuity and Responsibility. Identification of the team as a "fixed point of clinical responsibility" providing continuity of care for each veteran, wherever the veteran happens to be, for at least one year, with subsequent care subject to review of continuing need for intensive services.

The Directive 2000-034 establishes procedural guidelines for MHICM teams, operationalized in eight **minimum program standards**, which serve to complement the critical performance monitors.

Minimum standard	Threshold value
Percent of veterans with psychotic diagnosis at entry	*(50% or more)*
Percent of veterans with 30 or more psychiatric inpatient days in year before entry	*(50% or more)*
Mean adjusted face-to-face contacts per week/veteran	*(1.0 or more)*
Ratio of veterans to clinical FTEE (mean caseload)	*(7:1 to 15:1)*
Percent of veterans for whom at least 60% of contacts occur in community setting	*(50% or more)*
Percent of veterans receiving psychiatric rehabilitation or skills training services	*(25% or more)*
Percent of veterans discharged from MHICM program	*(< 20%)*
Number of clinical service providers on the team	*(4.0+ FTEE).*

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VA MENTAL HEALTH INTENSIVE CASE MANAGEMENT (MHICM) TEAM IMPLEMENTATION CHECKLIST

October 1, 2000

This is a checklist of primary criteria and recommended operational standards for use in evaluating a current or planned implementation of a MHICM team. The checklist is based on current VA criteria for MHICM teams and published CARF standards for Assertive Community Treatment (ACT). All program elements should be in place within the first year of team development. **Please indicate whether each element is in place for an existing team or included in plans for a new team. If "No", briefly identify a reason or obstacle to be addressed. Please record site identification data and general comments or questions below. Thank you.**

Site Identification Data:

Submitting Facility/VISN:_____

Contact Person/Title:_____

Phone:_____ Fax:_____

Address:_____

_____

_____

Alternate Contact Person/Title:_____

Phone:_____ Fax:_____

General Comments, Questions:

VA MENTAL HEALTH INTENSIVE CASE MANAGEMENT (MHICM) TEAM IMPLEMENTATION CHECKLIST

October 1, 2000

PRIMARY PROGRAM CRITERIA:

Element	In Place?	Why Not?
I. MHICM Target Population		
MHICM veterans will meet all four of the following admission criteria:		
1. diagnosis of severe and persistent mental illness (e.g., schizophrenia, bipolar disorder, major affective disorder, severe PTSD) with or without substance abuse;	Yes__ No__	
2. a severe functional impairment (i.e., veteran is not currently capable of successful and stable maintenance in a community living situation or participation in necessary treatment without intensive support);	Yes__ No__	
3. inadequately served by or unable to achieve a stable community adjustment with conventional clinic-based outpatient treatment or day treatment; and	Yes__ No__	
4. high VA hospital use (i.e. 30 or more days or 3 or more episodes of psychiatric inpatient care in the year preceding MHICM admission).	Yes__ No__	
II. MHICM Program Description		
1. MHICM services will be delivered by an integrated, multi-disciplinary team	Yes__ No__	
with a minimum of 4.0 designated clinical FTE	Yes__ No__	
who provide services in the community.	Yes__ No__	
2. MHICM services will be characterized by <u>five core treatment elements</u>, including:		
A. high intensity of care (primarily through home & community visits)	Yes__ No__	
with low caseloads (7-15 veterans per 1.0 clinical FTE),	Yes__ No__	
rapid attention to crisis and	Yes__ No__	
development of community living skills to prevent crisis;	Yes__ No__	

Element	In Place?	Why Not?
PRIMARY PROGRAM CRITERIA (continued):		
II. MHICM Program Description (continued):		
B. flexibility & community orientation with most services provided in community settings and involving natural support systems (family, landlord, employer, payee) whenever possible;	Yes__ No__	
C. focus on rehabilitation through practical problem solving, crisis resolution, and adaptive skill building;	Yes__ No__	
D. identification of team as a "fixed point of clinical responsibility" providing care for each veteran, wherever s/he happens to be, for a prolonged period (one year initially, then based on periodic review of continuing need for services); and	Yes__ No__	
E. appropriate transition to standard care or lower intensity treatment by the MHICM team when a veteran is: clinically stable, not abusing addictive substances, not relying on inpatient/ER services, capable of maintaining self in a community living situation, and independently participating in necessary treatment).	Yes__ No__	
III. Accountability		
Each MHICM team/clinician will:		
1. Utilize national DSS identifiers to designate MHICM workload;	Yes__ No__	
2. Maintain fidelity to MHICM operating principles and evidence-based clinical procedures; and	Yes__ No__	
3. Provide complete and timely MHICM monitoring information, including:	Yes__ No__	
A. Standard Intake Data Form (IDF) completed with all new admissions,	Yes__ No__	
B. Follow-Up Data Form (FDF) completed with each program veteran at 6 months and annually after entry,	Yes__ No__	

Element	In Place?	Why Not?
PRIMARY PROGRAM CRITERIA (continued):		
III. Accountability (continued)		
C. Clinical Process Form (CPF) completed by each veteran's primary case manager every 6 months after entry,	Yes__ No__	
D. MHICM Check List and ACT Fidelity measure completed annually by the team leader for the entire program, and	Yes__ No__	
E. FTE/Caseload Report completed monthly by the team leader.	Yes__ No__	
RECOMMENDED OPERATIONAL STANDARDS		
IV. Staffing		
1. Full-time team leader with master's level degree in mental health field (social work, psychology, nursing, counseling/guidance, rehabilitation) and 2000 hours (2 years) of post-degree treatment of people with serious mental illness.	Yes__ No__	
2. Minimum of eight hours (.20 FTE) psychiatrist time for every 50 vets.	Yes__ No__	
3. Minimum of 1.0 FTE RN and clearly designated, accessible nursing backup.	Yes__ No__	
4. Minimum of three-fourths of clinical staff with at least a bachelor's degree in a mental health field.	Yes__ No__	
5. Physician/nurses collaborate with other clinical staff to manage a system for prescribing/administering medications.	Yes__ No__	
6. One or more staff designated to organize daily planning of team activities.	Yes__ No__	
7. One or more staff with team chart auditing (QA) responsibilities.	Yes__ No__	

RECOMMENDED OPERATIONAL STANDARDS (Continued)

Element	In Place?	Why Not?
V. Hours of Coverage and Access		
1. Team identifies regular hours of service with at least 8 hrs on 5 days/week and evening/weekend hours as appropriate.	Yes__ No__	
2. Hospital/ER staff have 24-hour, 365-day on-call access to team for crisis, admission, discharge consultation.	Yes__ No__	
VI. Communication and Daily Planning		
1. Daily, M-F team meetings to review client status and organize/assign daily work of team. Rotated leadership.	Yes__ No__	
2. Integration of individual schedules for client contact (see treatment planning), emerging client needs, and team clinical responsibilities into daily work assignment.	Yes__ No__	
3. Recording of all client services and encounters, for purposes of auditing, workload credit, and evaluation.	Yes__ No__	
4. All staff remain accessible during work hours via beeper, pager, cellular phone.	Yes__ No__	
VII. Record-keeping		
1. Charts contain basic sections: identifying data problem list; treatment plans/reviews; progress notes; intake/history; medications/ lab results/consults; hospital summaries; clinical assessments/screenings; signed correspondence/releases; & consents/ administrative.	Yes__ No__	
2. Progress notes within local guidelines re: frequency/format, including: assessments of: clinical status, danger to self/others; medication compliance; significant events & status changes; general goals/treatment planning; client/family education; location & frequency of contact; clear goals.	Yes__ No__	

RECOMMENDED OPERATIONAL STANDARDS (Continued)

Element	In Place?	Why Not?
VII. Record-keeping (continued)		
3. Initial assessment done within 4 wks of entry & in chart, covering: psychiatric/ psychological (with DSM-IV diagnosis), family/other supports, instrumental ADL, vocational, housing, medical/dental, substance abuse.	Yes__ No__	
4. Treatment plan signed by multidisciplinary team in chart within 4 wks of entry and reviewed every 6 mos or as needed.	Yes__ No__	
VIII. Treatment Planning		
1. Weekly meetings for in-depth review of client treatment plans (1-2 clients per hour mtg), including current status & priorities, strengths & needs, short & long-term goals, staff activities & assignments.	Yes__ No__	
2. Multi-disciplinary treatment review schedule determined weeks ahead.	Yes__ No__	
3. Clear leadership of meetings.	Yes__ No__	
4. Problems, goals, plans, & priorities all specific & interpretable, with clear staff roles and activities.	Yes__ No__	
5. Treatment plan tasks and goals copied to client weekly/monthly schedule, for use in daily planning.	Yes__ No__	
6. Treatment plan reviewed with and co-signed by client.	Yes__ No__	
IX. Treatment and Rehabilitation Services		
7. Primary clinician assigned for each client, although team provides multi-disciplinary treatment for each client.	Yes__ No__	
8. Two or more staff with complementary skills / training identified on treatment plan to provide clinical services for each client.	Yes__ No__	

RECOMMENDED OPERATIONAL STANDARDS (Continued)

Element	In Place?	Why Not?
IX. Treatment and Rehabilitation Services (continued)		
9. Team provides a broad range of services for assigned clients as clinically indicated: advocacy; coordination; assessment & monitoring of symptoms/stressors/risks/ coping/med compliance/activities/ skill levels; planning; help/skills training for daily tasks (ADLs, shopping); family support/education, and crisis intervention (see treatment plans).	Yes__ No__	
10. Team initially sees each client for 2-3 substantial contacts per week on average with more frequent direct or phone contact as clinically indicated.	Yes__ No__	
11. On a typical working day, at least 20% of clients are seen.	Yes__ No__	
12. Clinicians spend 50-75% of work time providing treatment / rehabilitation services in community settings.	Yes__ No__	
13. Team serves as fixed point of clinical responsibility with a long-term commitment to care of each client as clinically indicated. Initial expectation is for at least one year.	Yes__ No__	
14. Team assumes primary clinical responsibility for assigned clients.	Yes__ No__	
X. Assessments		
1. Assessments in charts (see IV-19).	Yes__ No__	
2. Assessments completed by members of multi-disciplinary team, considering specific training or expertise: Psychiatric..psychiatrist Vocational..team professional staff, voc rehab specialist ADL..team professional staff Leisure time..team professional staff Family..team professional staff Medical..RN/MD	Yes__ No__	

RECOMMENDED OPERATIONAL STANDARDS (Continued)

Element	In Place?	Why Not?
XI. Admission / Discharge Criteria		
1. Admission criteria are clearly stated in policy statement and communicated to referring services, including client willingness to participate (i.e., signed releases, consents).	Yes__ No__	
2. Criteria for discharge or transition to lower intensity services are clearly stated in policy statement, including: clinically stable, not abusing addictive substances, not relying on extensive inpatient or emergency services, capable of maintaining self in a community living situation, and independently participating in necessary treatments.	Yes__ No__	
XII. VA, Community Agency, Client Relationships		
1. Meetings are held periodically with leaders of VA & community services to introduce MHICM staff, review policies & procedures, and gain cooperation. E.g., VA: inpatient/outpatient mental health units/services, ER/admitting staff, security, engineering, pharmacy, volunteer service, patient advocate, benefits counselor, VSOs. E.g., Community: ER, psychiatric/detox units, psychosocial clubs, vocational rehabilitation, police, housing authority, residential facilities, crisis intervention.	Yes__ No__	
2. If vocational rehabilitation staff are not on team, liaison exists with voc rehab service/agency to perform assessments, provide training & support.	Yes__ No__	
XIII. National Monitoring Requirements		
1. Clients are included in planning and evaluating team services, as clinically appropriate.	Yes__ No__	

RECOMMENDED OPERATIONAL STANDARDS (Continued)

Element	In Place?	Why Not?
XIII. National Monitoring Requirements (continued)		
2. Team completes a brief annual progress report on program developments, staffing, workload, projected/actual expenditures, including standards and fidelity checklists, due on November 15th each year.	Yes__ No__	
3. Each team maintains a log of veterans treated, with dates of entry/ transition/ discharge and monitoring data completion	Yes__ No__	
4. Designated clinician completes standard outcomes monitoring form at intake and 6 and 12 months after entry, and annually thereafter, for each veteran.	Yes__ No__	
5. Designated clinician or team completes clinical progress report form every 6 months after entry, for each veteran.	Yes__ No__	

10/00 nepec/msn

Assertive Community Treatment Fidelity Scale

Please complete all items <u>without</u> an "X" for this edited scale.
The scale and contact sheet are on six pages.

Form <u>A</u> (1)

VA Facility Name: _____

1. Five-Digit Facility code ___ ___ ___ . ___ ___ (6)

Local name of the Team/Program:

_____ ___ ___ (8)

2. Target population (*list one letter from the categories below*) ..... _____ (9)
   A. Seriously mentally ill veterans (non substance abuse)
   B. Seriously mentally ill veterans (primarily substance abuse)

X3. Item deleted (leave response areas blank). x_____x (10)

x___ ___x (12)

X4. Item deleted (leave response areas blank). x_____x (13)

X5. Items deleted (leave response areas blank).

x___ ___ . ___ ___x (17)
x___ ___ . ___ ___x (21)
x___ ___ . ___ ___x (25)
x___ ___ . ___ ___x (29)
x___ ___ . ___ ___x (33)
x___ ___ . ___ ___x (37)
x___ ___ . ___ ___x (41)

6. Regarding your clients:

x___ ___x (43)

A. How many veterans are currently in treatment in this program? ..... ___ ___ ___ (46)

B. How many veterans is the program designed to treat when it is operating at full capacity? ..... ___ ___ ___ (49)

X7. Item deleted (leave blank). x$___ ___ ___ ___ ___ ___ ___x (56)

X8. Items deleted (leave response areas blank).

x___ ___ ___x (59)
x___ ___ ___x (62)
x___ ___ ___x (65)

9. In what year was the program first implemented? ..... 19 or 20 ___ ___ (67)

Answer the following with the categories directly beneath the question.

10. What is the caseload of your program? ..... _____ (68)

A. 10 or fewer clients per clinician
B. 11—20 clients per clinician
C. 21—34 clients per clinician
D. 35—49 clients per clinician
E. 50 or more clients per clinician

11. What percent of clients have contact with more than one staff member in a given week? ..... _____ (69)

A. 90% or more
B. 64—89%
C. 37—63%
D. 10—36%
E. 10% or fewer

12. How frequently do the team members meet to plan or review services for each client? ..... _____ (70)

A. Program meets 4—5 days/week and usually reviews each client, even if only briefly
B. Program meets 2—3 days/week and usually reviews each client, even if only briefly
C. Program meets 1 day/week and usually reviews each client, even if only briefly
D. Program meets 1 day every other week and usually reviews each client, even if only briefly
E. Program meets 1 day per month or less and usually reviews each client, even if only briefly

13. How much of the time does the program's supervisor /director/coordinator provide services to clients? ..... _____ (71)

A. Normally, at least 50% of the time
B. Normally, between 25% and 50% of the time
C. Routinely as backup, or normally less than 25% of the time
D. On rare occasions as backup
E. Supervisor provides no direct services to clients

14. How much staff turnover has the program experienced in the *past two years*? ..... _____ (72)

A. Less than 20%
B. 20—39%
C. 40—59%
D. 60—80%
E. More than 80%

15. At what percent of full staffing has the program been operating for the *past twelve months*? ..... _____ (73)

A. 95% or more
B. 80—94%
C. 65—79%
D. 50—64%
E. less than 50%

16. Does the program have a defined target population and explicit admission criteria? ..... _____ (74)

A. The program actively recruits a defined population and all cases comply with explicit admission criteria.
B. The program typically actively seeks and screens referrals carefully, but occasionally bows to organizational pressure.
C. The program makes an effort to seek and select a defined set of clients, but accepts most referrals.
D. The program has a generally defined mission, but the admission process is dominated by organizational convenience.
E. The program has no set criteria and takes all types of cases, as determined outside the program.

17. Over the past six months, the highest monthly *intake* rate (that is, how many new clients have been admitted to the program) per month has been:..... _____ (75)

A. No greater than 6 per month
B. 7—9 per month
C. 10—12 per month
D. 13—15 per month
E. 16 or more per month

18. Which of the following five types of treatment services does your program offer? (*Check all that apply*)

A. Counseling/psychotherapy ..... _____ (76)

B. Housing support ..... _____ (77)

C. Substance abuse treatment ..... _____ (78)

D. Employment/ vocational rehabilitation ..... _____ (79)

E. Rehabilitative services ..... _____ (80)

19. What role does the program have in providing crisis services to its clients?..... _____ (81)

A. The program provides 24 hour coverage
B. The program provides emergency service backup; e.g., program is called, makes a decision about need for direct program involvement.
C. The program is available by telephone, predominately in a consulting role.
D. Emergency service has program-generated protocol for program clients.
E. The program has no responsibility for handling crises after hours.

20. In what percent of hospital admissions of program clients are staff involved in the decision to admit? ..... _____ (82)

A. 95% or more
B. 65—94%
C. 35—64%
D. 5—34%
E. 4% or less

21. In what percent of hospital discharge plans for program clients are program staff involved in developing the plan (planned jointly or in cooperation with the hospital staff)? ..... _____ (83)

A. 95% or more
B. 65—94%
C. 35—64%
D. 5—34%
E. 4% or less

22. What percent of program clients are discharged from the program within one year of program entry? ..... _____ (84)

A. 6% or fewer
B. 6—17%
C. 18—37%
D. 38—90%
E. 91% or more

23. What percent of time with clients is spent in the community (rather than in the office)? ..... _____ (85)

A. 80% or more
B. 60—79%
C. 40—59%
D. 20—39%
E. 19% or less

24. What percent of the team caseload is retained over a twelve month period? ..... _____ (86)

A. 95% or more
B. 80—94%
C. 65—79%
D. 60—64%
E. 59% or less

25. Does the program use street outreach and/or legal mechanisms (such as representative payees, probation/parole, outpatient commitment) to engage clients, as clinically indicated? ..... _____ (87)

A. The program has a strategy that includes street outreach and legal mechanisms whenever appropriate
B. The program has a strategy and uses most of the mechanisms that are available
C. Program attempts outreach but uses legal mechanisms only as convenient
D. Program makes initial attempts to engage but generally focuses efforts on most motivated clients.
E. The program almost never uses street outreach.

26. On average, how much service time does each client receive per week? ..... _____ (88)

A. 2 hours or more
B. 85—119 minutes
C. 50—84 minutes
D. 15—49 minutes
E. 14 minutes or less

27. On average, how many service contacts are made with each client per week? ..... _____ (89)

A. 4 or more per week
B. 3 per week
C. 2 per week
D. 1 per week
E. less than 1 per week

28. For clients who have a support network, such as family, landlords, or employers, on average how many staff contacts are made with members of support network per month? ..... _____ (90)

A. 4 or more per month
B. 3 per month
C. 2 per month
D. 1 per month
E. less than 1 per month

29. For clients with a substance use disorder, how many minutes per week of substance abuse treatment do they receive from program staff? _____ (91)
.....

A. 24 minutes per week or more
B. 17—23 minutes per week
C. 10—16 minutes per week
D. 3—9 minutes per week
E. 2 minutes per week or fewer

30. What percent of clients with a substance use disorder attend group treatment that is provided by program staff? _____ (92)
.....

A. 50% or more
B. 35—49%
C. 20—34%
D. 5—19%
E. 4% or fewer

31. For clients with both serious psychiatric illness and a substance use disorder, to what extent does the program employ an integrated "dual disorders" model that is stage-wise, non-confrontational, follows behavioral principles, considers interactions of mental illness and substance abuse, and has gradual expectations of abstinence) ? . _____ (93)

A. The program is fully based on such DD treatment principles, with treatment provided by program staff
B. The program primarily uses such a DD model, with some substance abuse treatment provided outside the program
C. The program uses a mixed model, including both DD and non-DD principles
D. The program uses primarily a traditional model
E. The program is fully based on a traditional model

32. What DSS Identifiers (formerly called "stop codes") are used to document the work of this program?

A. First DSS identifier (typically 552) ___ ___ ___ (96)

B. Second DSS identifier (typically 546) ___ ___ ___ (99)

C. Third DSS identifier (if applicable) ___ ___ ___ (102)

Contact person or Person completing this form:

Name _____

Telephone number (with area code and extension): ( ) _____ x _____

Fax number: ( ) _____

Email (Internet) Address: _____

Address information (street, building, mail stop, city, state, zip):

_____

_____

_____

If you have questions about the survey or items, please contact:
Mike Neale PhD: (203) 932-5711 x 3696

General comments accompanying the survey are welcome.

Please attach the survey to the Annual Report.

Appendix C

June 18, 2001

Director, NEPEC / VA MHICM Project Director

FY 2000 Performance and Minimum Standards Outlier Review

MHICM Program Directors and Clinical Staff

1. DRAFT Tables 2-1 to 2-27 for the FY 2000 MHICM National Performance Monitoring Report, have been placed on the NEPEC intranet page, http://vaww.nepec.mentalhealth.med.va.gov/, for field review. MHICM performance and critical monitors are listed in Table 2-1 and data are presented in Tables 2-2 to 2-27, formatted in Excel 2000. Each team is asked to review the tables for accuracy and to identify monitors for which the team is an outlier. Outlier values are those for which the team's value exceeds the threshold for a critical monitor. Outlier values in the undesired direction are **[**outlined**]** on the table. Outliers in the desired direction are underlined in **bold**. Team outliers are also summarized in separate tables for each of the four monitoring domains (structure, client, service delivery, and outcome) and for the eight Minimum Program Standards.

2. **Each team is asked to review team values on all tables for accuracy and to identify monitors and/or standards for which the team is an outlier. For each negative outlier, please complete an outlier review summary: 1) Identify the monitor; 2) Select a reason for outlier status; and 3) provide a brief explanation or summary of plans to correct the team value. Teams with outlier values in FY 2000 may want to consider adjusting team resources or operation to bring performance within the desired range for FY 2001.**

3. If you have questions or comments about a particular measure or criterion value, please note them on the review form or send them separately. Please refer questions about minimum standards review to Mike Neale (203.932.5711x3696) and return the completed review forms to NEPEC by Fax (203.937.4762) or mail (NEPEC/182, VA Connecticut HCS, 950 Campbell Avenue, West Haven, CT 065176), by July 5th, 2001.

4. Thank you for your continued efforts on behalf of veterans with serious mental illness.

Robert Rosenheck, M.D. Michael Neale, Ph.D.

MHICM Outlier Review, FY 2000

This form asks VA Mental Health Intensive Case Management (MHICM) teams to respond to their identification as an outlier on one or more critical performance monitors or minimum program standards, based on the DRAFT FY 2000 performance tables. **Please refer to the DRAFT tables to identify all critical monitors and standards for which your team's performance fell outside desired values for an MHICM team**. For each outlier in the undesired direction, please select a primary reason and explain the situation and/or plans for remedy below.

Please submit responses to Mike Neale PhD, VA MHICM Project Director, NEPEC/182, VA Connecticut, 950 Campbell Avenue, West Haven, CT 06516, by July 5th, 2001.

If you need additional pages, please make copies of the second page of this form.

MHICM SITE: _____ VA Station Code: _____

Person completing this report: _____

Phone number: (_____) _____ ext. _____

Monitor/standard: _____

Reason for outlier status: *Please select the most important reason. If more than one applies, indicate in the narrative.*

_____ a. Legitimate differences in this site's team that do not conflict with national program goals.

_____ b. Local policies at this site that may conflict with national program goals.

_____ c. Problems in program implementation for which corrective action has been taken.

_____ d. Problems in program implementation for which corrective action has since been planned.

_____ e. Problems in program implementation for which corrective action has not yet been planned.

Explain: _____

_____

_____

_____

Station Code: _____

Monitor/Standard: _____

Reason for outlier status: *Please select the most important reason. If more than one applies, indicate in the narrative.*

_____ a. Legitimate differences in this site's team that do not conflict with national program goals.

_____ b. Local policies at this site that may conflict with national program goals.

_____ c. Problems in program implementation for which corrective action has been taken.

_____ d. Problems in program implementation for which corrective action has since been planned.

_____ e. Problems in program implementation for which corrective action has not yet been planned.

Explain: _____

_____

_____

_____

Monitor/standards: _____

Reason for outlier status: *Please select the most important reason. If more than one applies, indicate in the narrative.*

_____ a. Legitimate differences in this site's team that do not conflict with national program goals.

_____ b. Local policies at this site that may conflict with national program goals.

_____ c. Problems in program implementation for which corrective action has been taken.

_____ d. Problems in program implementation for which corrective action has since been planned.

_____ e. Problems in program implementation for which corrective action has not yet been planned.

Explain: _____

_____

_____

Appendix D

Legend for MHICM Summary Report Tables

This appendix details the source and creation of variables included in national NEPEC monitoring of the 46 MHICM teams in operation on September 30, 2000. Site-by-site values for these variables, presented in 33 tables and summarized in the 4th MHICM National Performance Monitoring Report, are organized into domains of program structure, client characteristics, service delivery, clinical outcomes, and unit costs. Data for this report represent 3042 veterans who received services, and 2547 veterans for whom a follow-up interview was completed, between October 1, 1999 and September 30, 2000. Monitors for eight original MHICM teams and one replication team are based on data for reduced numbers of recently entered clients and may not accurately represent values for their entire client population. For each variable, outliers were identified by tests of significance ($p<0.05$) between the least square mean of the change score for a given team and the median site score.

Table 2-1: VA MHICM Program Monitors

Column Heading	Source/Variable and Computation Description
Monitoring Domain	Area addressed by monitoring variable (Structure/Client/Process/Outcome/Cost).
Program Monitor	Monitoring variable derived from MHICM interviews, ratings, and centralized VA data.
Unit	Unit of measurement for monitoring variable.
Report Table	Number of report table presenting data on a given monitoring variable.
Program Objective	Program objective (1-6) addressed by monitoring variable (see Appendix A).
Critical Monitor	Indicator of critical status for comparison and outlier identification.

Table 2-2: MHICM Programs through FY 2000

Column Heading	Source/Variable and Computation Description
VISN	Veterans Integrated Service Network number.
Site Name / Code	Host facility Name and Station Code, including 5-digit station code numbers for consolidated facilities.
Site Type	GM&S: General Medical and Surgical facility; NP: Former Neuro-Psychiatric facility.
Site Startup Year	Year team began accepting clients

Table 2-3: Allocated Staff and Funds (Original Dollars)

Column Heading	Source/Variable and Computation Description
	Source: MHSHG Resource tables
Allocated FTE	Original allocation of positions for MHICM services (excludes local contributions).
Personal Service	Original allocation of recurring Personal Service funds (salary and benefits).
All Other	Original allocation of recurring All Other funds (supplies, leased equipment).
Admin. Support	Original allocation of recurring Administrative Support funds (use at local discretion).
Total Program $	Original allocation of Total funds.
Row Heading	Computation Description
All Sites	Sum or mean across all 46 MHICM teams.
Site Average	Team mean (All Sites / 46).
Site S.D.	Standard deviation from the mean (Site Average).

Table 2-4: FY 2000 Program Expenditures

Column Heading	Source/Variable and Computation Description
	Source: FY 2000 site-generated progress reports.
FY 00 Filled FTE	FY 2000 reported MHICM filled FTE.
FY 00 P/S Expend.	FY 2000 reported expenditure of MHICM Personal Service funds.
FY 00 AO Expend.	FY 2000 reported expenditure of MHICM All Other funds.
FY 00 Total Expend.	FY 2000 reported Total expenditure of MHICM funds.

Table 2-5: Utilization of Staff Resources

Column Heading	Source/Variable and Computation Description
	Source: September, 2000 Monthly FTE/Caseload Report
Total FTE	MHICM allocated FTE ceiling, adjusted to include locally funded positions.
FY 00 Filled FTE	MHICM positions reported filled as of September 30, 2000.
% FTE Utilized	Percent MHICM positions reported filled as of September 30, 2000.
Clinical FTE	Positions available to provide MHICM case management services.
FTE Unfilled GTE 6 mos.	Yes = one or more MHICM positions unfilled for 6 or more months.
Assigned non-MHICM	Yes = one or more MHICM staff detailed to non-MHICM work.

Table 2-6: Clinical Staff and Caseload

Column Heading	Source/Variable and Computation Description
	Source: September, 2000 monthly FTE/Caseload Summary
Medical Support MD	Y = psychiatrist assigned to MHICM team.
Medical support RN	Y = nurse-case manager assigned to MHICM team.
Clinical FTE	Positions available to provide MHICM case management services.
9/00 Total # Vets	MHICM veterans as of September 30, 2000.
9/00 Caseload	Total Vets/Clinical FTE.
Target Caseload	Min: minimum caseload ratio of 7 clients per clinical FTE. Max: maximum caseload ratio of 15 clients per clinical FTE.

Table 2-7: Demographic Characteristics of Veterans at Intake

Column/Row Heading	Source/Variable and Computation Description
	Source: Initial Data Form (IDF), Forms 34 / 24.
Overall	All sites combined (N=46)
GM&S	General medicine & surgery facilities (N=29).
NP	Former neuro-psychiatric facilities (N=17).
Gender	% MHICM veterans who are male or female (34/24: Face sheet).
Age	Mean age of MHICM veterans (34/24: Face).
Race	% MHICM veterans from different racial/ethnic backgrounds (34/24: Face).
Marital status	% MHICM veterans with different marital histories (34: Face sheet; 24: Item #164).
Combat exposure	% MHICM veterans reporting exposure to combat (34: #25; 24: #18).
Employment Last 3 yrs	% MHICM veterans with different employment histories in past 3 years (34: #31; 24: #38).

Table 2-8: Entry Criteria Information

Row Heading	Source/Variable and Computation Description
	Source: IDF 34.
Mn hospital days 1 yr pre	Mean days spent in VA hospital; year before entry (34: #17).
Inpt psych unit referral	% MHICM veterans referred for MHICM treatment directly from inpatient unit (34: #16).
Primary psych diagnosis	% MHICM veterans with a DSM-IV psychiatric diagnosis at entry (34: #21; 23: 1-6).
GTE 30 days in hospital	% MHICM veterans with 30+ psychiatric hospital days in year before entry (34: #17; PTF). GTE: "Greater than or equal to."
Dual diagnosis at entry	% MHICM veterans with co-morbid substance abuse diagnosis at entry (34: #21; 23: #1-6).
Diagnosis	% MHICM veterans meeting various diagnostic criteria at entry (34: #21; 23: #1-6).
Disability/Pension	% MHICM veterans receiving any compensation or disability funds (34: #26-9; 24: Face).
SC Disability	% MHICM veterans with VA service-connected disability (34: #26; Face).
NSC Pension	% MHICM veterans receiving VA non-service connected pension (34: #26; Face).
SSI	% MHICM veterans receiving Social Security Supplemental Income (34: #27; 24: na).
SSDI	% MHICM veterans receiving Social Security Disability Income (34: #28; 24: na).
Payee	% MHICM veterans with a designated representative payee for funds (34: #29; 24: Face).

Table 2-9: Receipt of Disability Compensation or Pension Income

Column Heading	Source/Variable and Computation Description
	Source: IDF 34/24.
VA Compensation %	% MHICM veterans receiving VA service-connected compensation (34: #26; 24: Face).
NSC Pension %	% MHICM veterans receiving non-service-connected pension (34: #26; 24: Face) .
SSI %	% MHICM veterans receiving Social Security Supplemental Income (34: #27; 24: na).
SSDI %	% MHICM veterans receiving Social Security Disability Income (34: #28; 24: na).
Payee %	% MHICM veterans with a designated representative payee for funds (34: #29; 24: Face).
Any Disability %	% MHICM veterans receiving any compensation/disability pension (34: #26-29; 24: Face).

Table 2-10: Entry Criteria Information by Site

Column Heading	Source/Variable and Computation Description
	Source: IDF 34/24; Entry Processing Form (22); Discharge Data Form (23).
Lifetime Hosp GT 2 yrs	% MHICM vets reporting lifetime psychiatric hospital use GT 2 yrs (34: #190; 24: #247).
Years since 1st Hosp	Mean years since first psychiatric hospitalization (34: #47; 24: #246).
GTE 30days Hosp. yr pre	% MHICM veterans with 30+ VA hospital days; year before entry (34: #17; 22: #10).
Psychotic Dx at Entry	% MHICM veterans with psychotic diagnosis at entry (34: #22; 23: #1-6).
Dual diagnosis	% MHICM veterans with comorbid substance abuse diagnosis at entry (34: #21; 23: #1-6).

Table 2-11: Clinical Status at Entry

Column Heading	Source/Variable and Computation Description
	Source: Initial Data Form (IDF), Forms 34/24.
Inpatient at Entry	% veterans entering MHICM from inpatient status (34: #16; 24: na)
Low IADL	% MHICM veterans scoring 1 or 2 on one of four Form 34 IADL items (#121,123-125) or scoring 3 or 4 on one of four Form 24 Living Skills items (#226-229).
BPRS Mean	Mean BPRS Total score (sum 18 items) at entry (34: #265-283; 24: #439-457). Note: "1" added to each BPRS item to conform with current reporting conventions.
GAF Mean	Average GAF score at entry (34: #284; 24: #458).

Table 2-12: MHICM Program Tenure

Column Heading	Source/Variable and Computation Description
	Source: Clinical Progress Report (CPR), Forms 39/29; NEPEC Access files.
Total Vets	# MHICM veterans with FDF between 10/1/99 and 9/30/00 (Access/SAS).
Vets Discharged #	# Follow-up veterans discharged by program as of September 30, 2000 (Access).
Vets Discharged %	% Follow-up veterans discharged as of September 30, 2000 (#DC'd / Total # Vets).
Mean Days in Program	Average # Days in MHICM per veteran (FDF date minus IDF date).

Table 2-13: Pattern of Service Delivery

Column Heading	Source/Variable and Computation Description
	Source: Clinical Progress Report (CPR), Forms 39/29; NEPEC Paradox files.
Follow-up Vets	# MHICM veterans with FDF between 10/1/99 and 9/30/00 (Paradox/SAS).
Contact Frequency	Face-to-face: % MHICM veterans with GTE weekly contact (39: #40; 29: #41). Telephone: % MHICM veterans with GTE weekly contact (39: #41; 29:na). GTE: "Greater than or equal to."
Intensity	% MHICM veterans with GTE one hour of weekly contact (39: #45; 29: na).
Location	% MHICM veterans with GTE 60% of contacts in the community (39: #37; 29: na).
All Sites	Sum or average based on cumulative individual veteran (N=2547) data.
Site Average	Average of site values (N=46) in column, exclusive of "missing" sites.
Site Std. Dev.	Standard deviation of site values (N=46) in column, exclusive of "missing" sites.

Table 2-14: Outpatient Clinic Visits

Column Heading	Source/Variable and Computation Description
	Source: VA Outpatient Clinic (OPC) stops reported b/w 10/1/99 and 9/30/00.
Total Vets seen	# MHICM veterans with any MHICM stop code during FY 2000 (Access/SAS.
Mean contacts/Vet: 12mo.	Total: Avg. sum all MHICM encounters recorded under DSS identifiers 546 & 552 per vet.
	Telephone: Avg. sum telephone encounters recorded under DSS identifier 546 per vet.
	Face-Face: Avg. sum face-to-face encounters recorded under DSS identifier 552 per vet.
Amount time in program	Mean proportion of period (10/1/99-9/30/00) veterans spent in MHICM (per site).
	Used to standardize all veterans and sites at 12 mos. of program participation.
Adjusted face-face/vet	Mean face-to-face contacts, divided by the team's "amount of time in program".
Adjusted face-to-face contacts/wk/vet	Mean face-to-face contacts, adjusted for each team's amount of time in program, then divided by 52 weeks to get a contacts per week value.

Table 2-15: Therapeutic Services

Column Heading	Source/Variable and Computation Description
	Source: Clinical Progress Report (CPR), Forms 39/29.
Follow-up Vets	# MHICM veterans with FDF between October 1, 1999 and September 30, 2000.
Supportive Contact	% veterans receiving supportive contact services from MHICM (39: # 13; 29: #22).
Active Monitor	% veterans receiving active monitoring services from MHICM (39: #15; 29# #24).
Seen for Rehab	% veterans receiving rehabilitation services from MHICM (39: #16; 29: #26).
Psychother Relationship	% veterans receiving psychotherapeutic treatment from MHICM (39: #18; 29: #27).
Social/Rec Activities	% veterans in social/recreational activities organized by MHICM (39: #19; 29: # 28).
Crisis Intervent	% veterans receiving crisis intervention services from MHICM (39: #23; 29: #32).
Medicatn Mgmt	% veterans whose medications were managed by MHICM (39: #24; 29: na).
Medical Screen	% veterans screened for or treated for medical problems by MHICM (39: #25; 29: na).
Seen for Sub. Abuse	% veterans receiving substance abuse treatment from MHICM (39: #26; 29: na).
Housing Support	% veterans assisted with locating or managing housing by MHICM (39: #27; 29: na).
Vocational Support	% veterans assisted with locating or maintaining a job by MHICM (39: #30; 29: na).

Table 2-16: Client-Rated Therapeutic Alliance

Column Heading	Source/Variable and Computation Description
	IDF 34/24; Follow-up Data Form (FDF), Forms 37/27.
	MHICM alliance at 6 mos. was compared with pre-entry alliance with primary clinician.
Pre-Entry N	MHICM veterans with IDF entry interview data on this measure.
Pre-Entry Mean	Average score for this measure at entry (34: #219-225; 24: # 338-344).
Follow-up Mean	Average score for this measure at 6 months (37: #179-185; 27: #263-269), adjusted for site, time in program, baseline value, and eleven other baseline covariates.
Change to Follow-up	Least squares mean derived from analysis of covariance, including site, time in program, baseline value, and eleven other baseline covariates.
Percent Change	Change to Follow-up divided by Pre-Entry Mean to get adjusted percent change.
	Outlined values represent significant t-test differences, in the direction of lower scores, between LS means for the indicated site and the median site on this variable.

Table 2-17: Fidelity to Assertive Community Treatment Model

Column Heading	Source/Variable and Computation Description
	DACTS self-report by sites; confirmed with other available data.
Human Resources	Average program score on 7 human resources items.
Organiz'l Boundaries	Average program score on 7 organizational boundaries items.
Services	Average program score on 6 nature of services items.
Sub.Abuse Tx	Average program score on 3 substance abuse treatment items.
Total Score	Total program score: sum of 23 DACTS items.
Avg. Score	Average program score: mean of 23 DACTS items.

Table 2-18: VA Hospital Use: 183 Days Pre- vs. Post-Entry

Column Heading	Source/Variable and Computation Description
	Source: PTF through 9/30/00.
Total N FY 00	# MHICM veterans as of 9/30/00.
N 183 Days	# MHICM veterans with 183 or more days in program (entered by 3/31/00).
Pre-IDF MH Days/Vet	Mean mental health hospital days per veteran in 183 days before MHICM entry.
Post-IDF MH Days/Vet	Mean mental health hospital days per veteran in 183 days after MHICM entry.
Change MH Days/Vet	Mean change in mental health hospital days (Post- minus pre-MHICM entry). Outlined values exceed one standard deviation from mean in direction of lower days.
% Change MH Days/Vet	Mean % change in mental health days (Change MH Days/Pre-IDF MH Days). Outlined values exceed one standard deviation from mean in direction of lower %.
Inp't MH Per Diem FY00	Mean national inpatient mental health per diem cost (NMHPPMS): $690.00 [hidden col.]
Change MH Cost/Vet	183-day inp't MH reduction per MHICM veteran (Inp't MH Per Diem x Change MH Days).
Sum Change MH Cost/ Program	183-day inp't MH reduction per MHICM program (Change MH Cost/Vet x N 183 Days). Note: Subtract FY 2000 program expenditures to get an estimate of total program cost reduction exclusive of other outpatient MH costs. Cost change data are unadjusted for inflation and do not fully represent cost reductions achieved by original MHICM sites.

Table 2-18a: VA Hospital Use: 365 Days Pre- vs. Post-Entry
Table 2-18b: VA Hospital Use: 548 Days Pre- vs. Post-Entry
Table 2-18c: VA Hospital Use: 730 Days Pre- vs. Post-Entry

The format for these Tables is identical to that for Table 2-18, with the exception that the Pre- and Post-Entry time frames increase to: a) 365 days; b) 548 days; and c) 730 days. For each table, data are reported only for veterans with sufficient time in the program to allow that Pre-Post comparison.

Table 2-19: Brief Psychiatric Rating Scale (Observed symptoms)

Column Heading	Source/Variable and Computation Description
	IDF 34/24; Follow-up Data form (FDF), Forms 37/27.
Pre-Entry N	MHICM veterans with entry interview data on this measure.
Pre-Entry Mean	Mean BPRS Total score (sum 18 items) at entry (34: #265-283; 24: #439-457).
Follow-up Mean	Mean BPRS Total score (sum 18 items) at follow-up (37: #225-243; 27: #376-394), adjusted for site, time in program, baseline value, and eleven other baseline covariates.
Change at Follow-up	Least squares mean derived from analysis of covariance, including site, time in program, baseline value, and eleven other baseline covariates.
Percent Change	Change to Follow-up divided by Pre-Entry Mean to get adjusted percent change. Outlined value represents significant t-test difference, in the direction of higher scores, between LS means for the indicated site and the median site on this variable. Note: "1" added to each BPRS item to conform with current reporting conventions.

Table 2-20: Symptom Severity (Client-reported symptoms)

Column Heading	Source/Variable and Computation Description
	IDF 34; FDF 37 Schizophrenia Outcomes Module & Brief Symptom Inventory items (Note: Replication site variables are scaled differently and not included.)
Pre-Entry N	MHICM veterans with entry interview data on this measure.
Pre-Entry Mean	Mean symptom score at entry (34: #51-80; 24: #377-429).
Follow-up Mean	Mean symptom score at follow-up (37: #30-59; 27: #314-366), adjusted for site, time in program, baseline value, and eleven other baseline covariates.
Change at Follow-up	Least squares mean derived from analysis of covariance, including site, time in program, baseline value, and eleven other baseline covariates.
Percent Change	Change to Follow-up divided by Pre-Entry Mean to get adjusted percent change. Outlined value represents significant t-test difference, in the direction of higher scores, between LS means for the indicated site and the median site on this variable.

Table 2-21: Global Assessment of Functioning (GAF; DSM-IV Axis V)

Column Heading	Source/Variable and Computation Description
	IDF 34/24; FDF 37/27.
Pre-Entry N	MHICM veterans with entry interview data on this measure.
Pre-Entry Mean	GAF/GAS score at entry (34: #284; 24: #458).
Follow-up Mean	Mean GAF/GAS score at follow-up (37: #244 or 39: #116; 27: #395) adjusted for site, time in program, baseline value, and 11 baseline covariates.
Change at Follow-up	Least squares mean derived from analysis of covariance, including site, time in program, baseline value, and eleven other baseline covariates.
Percent Change	Change to Follow-up divided by Pre-Entry Mean to get adjusted percent change. Outlined value represents significant t-test difference, in the direction of lower scores, between LS means for the indicated site and the median site on this variable.

Table 2-22: Instrumental Activities of Daily Living (Schizophrenia Outcomes Module items)

Column Heading	Source/Variable and Computation Description
	IDF 34/24; FDF 37/27.
Pre-Entry N	MHICM veterans with entry interview data on this measure.
Pre-Entry Mean	Mean IADL score at entry (34: # 114-125) Living skills (24: # 226-230).
Follow-up Mean	Mean IADL (37: #77-88) or Living skills (27: # 165-169) score at follow-up adjusted for site, time in program, baseline value, and eleven other baseline covariates.
Change at Follow-up	Least squares mean derived from analysis of covariance, including site, time in program, baseline value, and eleven other baseline covariates.
Percent Change	Change to Follow-up divided by Pre-Entry Mean to get adjusted percent change. Outlined value represents significant t-test difference, in the direction of lower scores, between LS means for the indicated site and the median site on this variable.

Table 2-23: Quality of Life (Lehman QOLI Delighted-Terrible items)

Column Heading	Source/Variable and Computation Description
	IDF 34/24; FDF 37/27.
Pre-Entry N	MHICM veterans with entry interview data on this measure.
Pre-Entry Mean	Mean QOL scores at entry (34: #23,128,136,147,150,240; 24: #347,354,368,371,376).
Follow-up Mean	Mean QOL scores (37: #14,91,99,110,113,201; 27: #284,291,305,308,313) adjusted for site, time in program, baseline value, and eleven other baseline covariates.
Change at Follow-up	Least squares mean derived from analysis of covariance, including site, time in program, baseline value, and eleven other baseline covariates.
Percent Change	Change to Follow-up divided by Pre-Entry Mean to get adjusted percent change. Outlined value represents significant t-test difference, in the direction of lower scores, between LS means for the indicated site and the median site on this variable.

Table 2-23a: Housing Independence Index

Column Heading	Source/Variable and Computation Description
	IDF 34; FDF 37: Days in each setting were multiplied by weight for restrictiveness.
Pre-Entry N	MHICM veterans with entry interview data on this measure.
Pre-Entry Sum	Sum of weighted HOUI items at entry (34: #138*4, 140*3, 142*2, 144*1, 146*0).
Follow-up Sum	Sum of weighted HOUI items at follow-up (37: #101*4, 103*3, 105*2, 107*1, 109*0) adjusted for site, time in program, baseline value, and eleven other baseline covariates.
Change at Follow-up	Least squares mean derived from analysis of covariance, including site, time in program, baseline value, and eleven other baseline covariates.
Percent Change	Change to Follow-up divided by Pre-Entry Mean to get adjusted percent change. No outliers were assigned to this variable in FY 2000.

Table 2-24: VA Mental Health Services Satisfaction (3 item)

Column Heading	Source/Variable and Computation Description
	IDF 34; FDF 37.
Pre-Entry N	MHICM veterans with entry interview data on VA Mental Health services satisfaction.
Pre-Entry Mean	Sum VA MH Satisfaction score at entry (34: #232,235,239; 24: na).
Follow-up Mean	Sum VA MH Satisfaction score at follow-up (37: #193,196,200; 27: na) adjusted for site, time in program, baseline value, and eleven other baseline covariates.
Change at Follow-up	Least squares mean derived from analysis of covariance, including site, time in program, baseline value, and eleven other baseline covariates.
Percent Change	Change to Follow-up divided by Pre-Entry Mean to get adjusted percent change. Outlined value represents significant t-test difference, in the direction of lower scores, between LS means for the indicated site and the median site on this variable.

Table 2-25: Satisfaction with VA MHICM Services (vs. VA Mental Health Services; single items)

Column Heading	Source/Variable and Computation Description
	FDF 37/27.
Pre-Entry N	MHICM veterans with entry interview data on VA mental health services satisfaction.
Pre-Entry Mean	Mean VA MH services satisfaction score at entry (34: #228; 24: # 319).
Follow-up Mean	Mean MHICM Satisfaction score at follow-up (37: #190; 27: #257) adjusted for site, time in program, baseline value, and eleven other baseline covariates.
Change at Follow-up	Least squares mean derived from analysis of covariance, including site, time in program, baseline value, and eleven other baseline covariates.
Percent Change	Change to Follow-up divided by Pre-Entry Mean to get adjusted percent change. Outlined value represents significant t-test difference, in the direction of lower scores, between LS means for the indicated site and the median site on this variable.

Table 2-26: MHICM Unit Costs (per Veteran, FTE, Visit)

Column Heading	Source/Variable and Computation Description
	Source: FY 2000 Site-generated annual progress reports, OPC stop codes.
FY00 Total Expenditures	FY 2000 reported total expenditure of MHICM funds.
Total Vets	# MHICM veterans receiving MHICM services in FY 2000 (OPC).
Cost per Veteran	Annual cost per MHICM veteran (FY 00 Total Expenditures/Total Vets)
FY00 PS Expenditures	FY 2000 reported personal service expenditures
FY00 Filled FTE	MHICM positions reported filled as of September 30, 2000.
Total FTE	MHICM allocated FTE ceiling.
Cost per FTE	Annual cost per MHICM FTE (FY 00 P/S Expenditures/Total FTE)
Total Visits/Yr	Total MHICM stop code visits (per veteran), adjusted for 52 weeks.
Cost per Visit	Cost per visit (FY 00 Total Expenditures/Total Visits per Yr)

Table 2-27: Site Performance on MHICM Critical Monitors

Column Heading	Source/Variable and Computation Description
	Source: Critical monitor outliers identified on tables 2-1 to 2-24.
Structure	# of 3 critical monitors in tables 2-2 to 2-6 in undesired direction.
Patient	# of 3 critical monitors in tables 2-7 to 2-11 in undesired direction.
Process	# of 4 critical monitors in tables 2-12 to 2-17 in undesired direction.
Outcome	# of 7 critical monitors in tables 2-18 to 2-25 in undesired direction.
Site Total	Total # of 17 critical monitors in tables 2-2 to 2-25 in undesired direction.

Table 2-28: Outliers for Team Structure Monitors

Column Heading	Source/Variable and Computation Description
	Source: Outliers from Tables 2-5 and 2-6.
FTE Unfilled	Yes = one or more MHICM positions unfilled for 6 or more months (Table 2-5).
Unassigned Medical	N = physician (MD) or nurse-case manager (RN) not assigned to MHICM team (2-6).
Caseload Size	Total # MHICM veterans as of 9/30/00 divided by Clinical FTE as of 9/30/00 (2-6).
Team Size	Clinical FTE as of September 30, 2000 (Monthly FTE/Caseload Report) (2-5).
Total Team Outliers	# Team Structure monitors for which team value is an outlier (Range: 0-5).
# Applicable Monitors	# Team Structure monitors that applied to team in FY 2000 (range: 0-5).
% Outliers/Applicable	# team outliers divided by # applicable monitors.

Table 2-29: Outliers for Client Characteristics Monitors

Column Heading	Source/Variable and Computation Description
	Source: Outliers from Tables 2-10 and 2-11.
% Clients GTE 30 Days	% MHICM veterans with 30+ VA hospital days; year before entry (2-10).
% Clients Psychotic Dx	% MHICM veterans with psychotic diagnosis at entry (2-10).
Mean GAF at Entry	Average GAF score at entry for veterans seen by team (2-11).
Total Team Outliers	# Client Characteristics monitors for which team value is an outlier (Range: 0-3).
# Applicable Monitors	# Client Characteristics monitors that applied to team in FY 2000 (range: 0-3).
% Outliers/Applicable	# team outliers divided by # applicable monitors.

Table 2-30: Outliers for Clinical Process Monitors

Column Heading	Source/Variable and Computation Description
	Source: Outliers from Tables 2-12, 2-13, 2-14 and 2-15.
Tenure	% veterans discharged as of September 30, 2000 (2-12).
Intensity	% veterans with one hour or more of weekly contact (2-13).
Location	% veterans with 60% or more of contacts in the community (2-13).
Frequency # Adjusted	Mean face-to-face visits, adjusted for each team's amount of time in program, then divided by 52 weeks to get a visits per week value (2-14).
Team provides...Rehab	% veterans receiving rehabilitation services from MHICM team (2-15).
Total Team Outliers	# Clinical Process monitors for which team value is an outlier (range: 0-5).
# Applicable Monitors	# Clinical Process monitors that applied to team in FY 2000 (range: 0-5).
% Outliers/Applicable	# team outliers divided by # applicable monitors.

Table 2-31: Outliers for Client Outcome Monitors

Column Heading	Source/Variable and Computation Description
	Source: Outliers from Tables 2-18a, 2-19, 2-20 and 2-23.
365 Days % Change	Mean % change in mental health days after 365 days: Outlined values exceed one standard deviation from mean in direction of lower % (2-18a).
Reported Symptoms %	Change in BSI at Follow-up (Least squares mean derived from analysis of covariance, including site, time in program, baseline value, and eleven baseline covariates) divided by pre-score to get adjusted percent change. Outliers represent significant t-test difference, in the direction of higher scores, between LS mean for the team and the median site on this variable (2-20).
Observed Symptoms %	Change in BPRS at Follow-up: L east squares mean derived from analysis of covariance, including site, time in program, baseline value, and eleven baseline covariates) divided by pre-score to get adjusted percent change. Outliers represent significant t-test difference, in the direction of higher scores, between LS mean for the team and the median site on this variable (2-19).
Quality of Life %	Change in QOL at Follow-up (L east squares mean derived from analysis of covariance, including site, time in program, baseline value, and eleven baseline covariates) divided by pre-score to get adjusted percent change. Outliers represent significant t-test difference, in the direction of lower scores, between LS mean for the team and the median site on this variable (2-23).

Table 2-32: Outliers for Minimum Standards

	Source: Selected Outliers from Tables 2-5, 2-6, 2-10, 2-12, 2-13, 2-14, and 2-15.
% Clients Psychotic Dx	% vets with psychotic diagnosis at entry *(Threshold: 50% or more)* (2-10).
% Clients GTE 30 Days	% vets with 30+ psychiatric inpatient days in year pre-entry *(50% or more)*(2-10).
Frequency # Adjusted	Mean adjusted face-to-face visits per week per veteran *(1.0 or more)*(2-14).
Caseload Size	Ratio of veterans to clinical FTE (mean caseload as of 9/30/00)*(7:1 to 15:1)* (2-6).
Location	% vets for whom 60+% of contacts occur in community *(50% or more)* (2-13).
Team provides...Rehab	% vets receiving psychiatric rehabilitation/skills training *(25% or more)* (2-15).
Tenure	% vets discharged from MHICM program in FY 2000 *(< 20%)* (2-12).
Team Size	# Clinical case managers on team as of 9/30/00 *(4.0+ FTEE)* (2-5).
Total Outliers	# of 8 minimum standards for which team value was an outlier (range: 0-8).
% Outlier	% of 8 minimum standards for which team value was outlier in FY 2000.
% Outliers	% of 8 minimum standards for which tam value was outlier in FY 1999.
Change % Outliers	Change in team % outliers from FY 1999 to FY 2000.

Table 2-33 Site Outlier Review Summary

	Source: Site completed Outlier Review Forms for indicated outliers.
Site # Outliers	# of critical monitors for which team value was an outlier in undesired direction.
Reason A	# Team responses indicating “Legitimate differences in this site’s team that do not conflict with national program goals”.
Reason B	# Team responses indicating “Local policies at this site that may conflict with national program goals”.
Reason C	# Team responses indicating “Problems in program implementation for which corrective action has been taken”.
Reason D	# Team responses indicating “Problems in program implementation for which corrective action has since been planned”.
Reason E	# Team responses indicating “Problems in program implementation for which corrective action has not yet been planned”.
Sum of Responses	# outliers addressed in Outlier Review.

Appendix E. MHICM and Low Intensity Case Management Visits by Facility and Network, FY 2000

	Source: VA Outpatient Clinic File (Austin, TX).
VISN	Veterans Integrated Service Network number (1-22).
SITE	VA Facility name.
MHICM Community	Visits recorded under DSS Identifier (stop code) #552, MHICM.
Veterans (N)	Number of veterans with at least one MHICM visit.
Visits (Mean)	Mean number of MHICM visits per veteran with at least one visit.
Low Intensity CM Visits	Visits recorded under DSS Identifier #564, General Case Management.
Veterans (N)	Number of veterans with at least one Low Intensity visit.
Visits (Mean)	Mean number of Low Intensity visits per veteran with at least one visit.
Facility Sum/Mean	Total number of veterans and overall mean of visits across all facilities.
VISN Sum/Mean	Total number of veterans and overall mean of visits across all VISNs.

Appendix E

MHICM and Low Intensity Case Management Visits by Facility and Network, FY 2000.

VISN	SITE	MHICM Community Visits (Stop Code 552)		Low Intensity CM Visits (Stop Code 564)	
		Veterans (N)	Visits (Mean)	Veterans (N)	Visits (Mean)
1	BEDFORD*	183	82.7	0	0.0
1	BROCKTON*	267	88.3	0	0.0
1	TOGUS*	51	32.6	0	0.0
1	WEST HAVEN*	251	21.5	0	0.0
1	BOSTON	5	39.6	0	0.0
	VISN 1	**757**	**52.9**	**0**	**0.0**
2	ALBANY*	57	2.0	0	0.0
2	BUFFALO*	186	14.8	0	0.0
2	CANANDAIGUA*	189	59.0	0	0.0
2	SYRACUSE*	90	27.0	0	0.0
2	HEALTHCARE NY V2	44	13.7	0	0.0
2	HCS UPSTATE V2 ALBANY	64	2.5	1	2.0
	VISN 2	**630**	**19.8**	**1**	**0.3**
3	BRONX*#	285	7.7	0	0.0
3	BROOKLYN*	89	17.2	0	0.0
3	EAST ORANGE*	35	62.8	0	0.0
3	MONTROSE*	129	36.3	0	0.0
3	LYONS CBOC	1	45.0	0	0.0
3	ST. ALBANS	1	1.0	0	0.0
3	NORTHPORT	0	0.0	66	10.8
	VISN 3	**540**	**24.3**	**66**	**1.5**
4	COATESVILLE*	182	19.3	231	13.1
4	PITTSBURGH-HIGHLAND*	113	48.4	0	0.0
4	PITTSBURGH-UNIV DR	1	3.0	0	0.0
	VISN 4	**296**	**23.6**	**231**	**4.4**
5	PERRY POINT*	128	40.1	0	0.0
5	BALTIMORE	1	1.0	0	0.0
	VISN 5	**129**	**29.1**	**0**	**1.2**
6	SALISBURY*	25	5.3	115	4.2
6	DURHAM	0	0.0	22	3.9
6	CHARLOTTE CBOC	20	4.2	43	3.0
	VISN 6	**45**	**3.2**	**180**	**3.7**

VISN	SITE	MHICM Community Visits (Stop Code 552) Veterans (N)	MHICM Community Visits (Stop Code 552) Visits (Mean)	Low Intensity CM Visits (Stop Code 564) Veterans (N)	Low Intensity CM Visits (Stop Code 564) Visits (Mean)
7	ATLANTA*	62	79.5	0	0.0
7	AUGUSTA*	68	176.9	0	0.0
7	TUSKEGEE*	82	29.9	0	0.0
7	LENWOOD	8	3.5	0	0.0
7	MONTGOMERY	1	26.0	0	0.0
7	TUSCALOOSA	0	0.0	51	10.6
	VISN 7	**221**	**52.6**	**51**	**1.8**
8	GAINESVILLE*	113	24.9	0	0.0
8	MIAMI*	60	69.2	35	1.1
	VISN 8	**173**	**31.5**	**35**	**1.5**
9	MOUNTAIN HOME*	100	25.9	0	0.0
9	MURFREESBORO	60	147.4	0	0.0
	VISN 9	**160**	**86.6**	**0**	**0.0**
10	CHILLICOTHE*	72	73.6	23	3.1
10	CINCINNATI*	77	28.1	0	0.0
10	CLEVELAND BRECKSV*	110	11.5	0	0.0
10	COLUMBUS*	48	30.2	0	0.0
10	DAYTON*	85	13.4	0	0.0
10	CLEVELAND WADE PARK	74	38.3	0	0.0
10	CANTON SOC^	3	14.7	0	0.0
10	LORAIN CBOC^	3	15.3	0	0.0
10	AKRON CBOC^	25	34.2	0	0.0
	VISN 10	**497**	**34.1**	**23**	**1.2**
11	ANN ARBOR*	57	70.6	0	0.0
11	BATTLE CREEK*	132	33.5	0	0.0
11	DETROIT*	86	48.0	0	0.0
11	NORTHERN INDIANA	94	16.6	83	17.9
	VISN 11	**369**	**42.2**	**83**	**4.5**
12	CHICAGO-WEST SIDE*	98	43.0	0	0.0
12	MADISON*	44	199.8	0	0.0
12	NORTH CHICAGO*	194	113.5	0	0.0
12	TOMAH	0	0.0	195	32.1
12	MILWAUKEE	1	1.0	0	0.0
	VISN 12	**337**	**71.5**	**195**	**6.4**
13	MINNEAPOLIS*	66	59.8	0	0.0
13	ST. CLOUD	0	0.0	52	19.7
	VISN 13	**66**	**29.9**	**52**	**9.9**

VISN	SITE	MHICM Community Visits (Stop Code 552) Veterans (N)	MHICM Community Visits (Stop Code 552) Visits (Mean)	Low Intensity CM Visits (Stop Code 564) Veterans (N)	Low Intensity CM Visits (Stop Code 564) Visits (Mean)
14	KNOXVILLE*	23	2.5	5	1.4
14	554A4	57	38.1	11	4.8
14	DES MOINES	11	1.4	15	4.3
14	NEBRASKA	0	0.0	1	1.0
14	CPHN DES MOINES	10	10.5	10	10.4
14	CPHN KNOXVILLE	2	30.5	0	0.0
	VISN 14	**103**	**13.8**	**42**	**3.7**
15	COLUMBIA MO	27	10.4	0	0.0
	VISN 15	**27**	**10.4**	**0**	**0.0**
16	HOUSTON	0	0.0	44	31.9
16	LITTLE ROCK^	0	0.0	61	8.7
16	NO. LITTLE ROCK	0	0.0	365	11.5
	VISN 16	**0**	**0.0**	**470**	**17.4**
17	DALLAS*	63	60.8	0	0.0
17	WACO*#	59	40.6	0	0.0
	VISN 17	**122**	**50.7**	**0**	**0.0**
18	PHOENIX	1	3.0	194	8.1
	VISN 18	**1**	**3.0**	**194**	**8.1**
19	DENVER*	145	24.8	1	5.0
19	SOUTHERN COLORADO*	100	13.1	93	9.0
19	FORT HARRISON	0	0.0	113	1.6
19	WHITEFISH CBOC	0	0.0	31	1.7
19	PUEBLO CBC	3	9.7	3	7.7
19	COLORADO SPGS CBC	9	5.7	25	2.8
19	SHERIDAN	15	5.2	0	0.0
	VISN 19	**272**	**8.3**	**266**	**4.0**
20	AMERICAN LAKE*	58	55.5	0	0.0
20	BOISE*	47	59.9	0	0.0
20	PORTLAND*	76	60.5	3	1.0
20	SEATTLE*	61	74.3	0	0.0
20	SPOKANE	11	5.8	46	4.6
	VISN 20	**253**	**51.2**	**49**	**1.1**

VISN	SITE	MHICM Community Visits (Stop Code 552) Veterans (N)	MHICM Community Visits (Stop Code 552) Visits (Mean)	Low Intensity CM Visits (Stop Code 564) Veterans (N)	Low Intensity CM Visits (Stop Code 564) Visits (Mean)
21	SAN FRANCISCO*	38	46.3	0	0.0
21	PALO ALTO-PALO ALTO	0	0.0	31	2.9
21	PALO ALTO-MENLO PARK	0	0.0	138	3.6
21	SAN JOSE	0	0.0	164	3.1
21	COMPREHEN HMLS CTR	27	11.9	1	7.0
	VISN 21	**65**	**11.6**	**334**	**3.3**
22	WEST LA*	59	21.0	0	0.0
	VISN 22	**59**	**21.0**	**0**	**0.0**
	Facility Sum/Mean	5122	44.3	2272	11.0
	VISN Sum/Mean	5122	30.5	2272	3.4
	Standard Deviation	213.0	23.0	129.6	4.2
	Coefficient of Variation	0.9	0.8	1.3	1.2

* MHICM team operational during in FY 2000.

^ MHICM team in development during FY 2000.

Team ceased operation or monitoring during FY 2000.